TECHNOTRADE LTD

Petrol Station Management Solution

Petrol Station Control Panel

2016

CONTENTS

Introduction

This guide contains the information about the control system for petrol station "Petrol Station Control Panel" (The Panel), its functional and technical specifications, equipment usage, safety requirements, advice on operation preparation, programming and maintenance, and fuel and other goods sales operation.

1. Function.

The Panel is designed for management and accounting of fuel sales, as well as other goods sales at petrol stations.

After the purchase of The Panel, please arrange the contract for the technical support with the service center, authorized to provide such service for The Panel by the manufacturer.

ATTENTION! Unqualified intrusion into The Panel for the service or repair purposes can cause its damage.

For all the questions arising while studying The Panel operation, please contact the appropriate authorized service center.
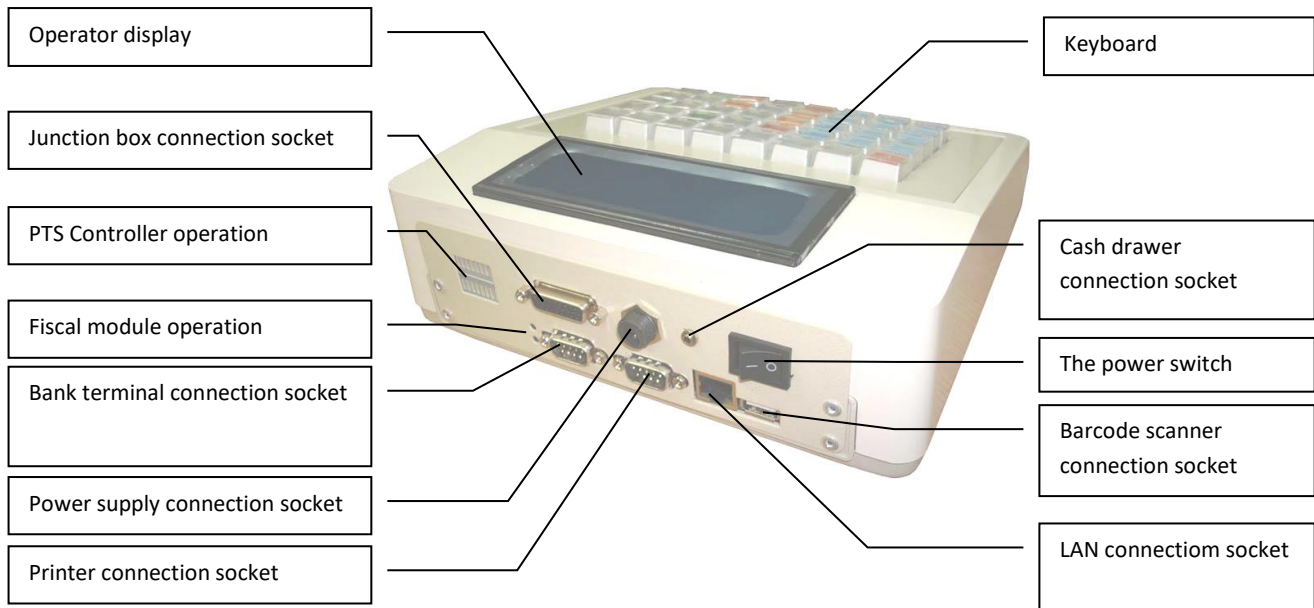
Please send all your questions or complaints regarding The Panel operation to the authorized service center.

2. Technical features of the Panel

Dispenser connection interface type	485
Dispenser connection protocol type	See Appendix 1
The maximum number of channels (simultaneously used protocols) for the fuel dispensing units connection	4
The maximum number of fuel dispensing units simultaneously connected to the device	16 logical addresses
The maximum number of nozzles on each fuel dispensing unit	6
Support for automatic registration of dispensing	Yes
The type of interface of the ATG connection	232/485
The type of protocol for ATG connection	
The maximum number of channels (simultaneously used protocols) for ATG connection	3
Maximum number of ATG, simultaneously connected to the device	16
The ability to simultaneously use multiple management systems	Yes
The type of interface for barcode scanner connection	USB
The type of the interface for the connection to the printer	232
The model of printer supported	UNS-TP61.01S
Voltage of cash drawer controls	12 V
The type of connector for cash drawer	MicroJack 2.5 mono
The interface type for the Internet and a local area network connection	Ethernet port RJ-45
Display type	LCD character
Display resolution	20x4 characters
Keyboard type	Mechanic
The number of keys	5x8 = 40

3.   Elements of control and switching of the Panel.

| Operator display |
| Junction box connection socket |
| PTS Controller operation |
| Fiscal module operation |
| Bank terminal connection socket |
| Power supply connection socket |
| Printer connection socket |

| Keyboard |
| Cash drawer connection socket |
| The power switch |
| Barcode scanner connection socket |
| LAN connectiom socket |

Elements function:

- **Keyboard**-multifunctional. One or two major functions are printed on the keys. Designed for input of data by operator.
- **Operator's display** – LCD character/digital 20 x 4. Designed for display of information necessary for the operator work.
- **Fiscal Module operation indicator** consists of two LEDs that can be of any color. The color of the LEDs does not display any information. It provides the following information:
  - Top LED:

Number of flashes	Failure description
2	Works properly
3	FM is not initialized
4	Error reading the file
5	Error of file size
6	MD5 checksum error
7	Missing FM firmware
8	Error of encryption keys
9	Error of firmware version
10	The version number of the firmware installed is older than current
11	Error of firmware module number
12	Error of firmware model number
13	Error of firmware type or series
Constantly lit	Update in progress or hardware failure
Not lit	External power supply check command wait

  - The bottom LED shows the presence of an external power supply (Constantly lit when present).
- **PTS Controller dispenser operation indicator** – LED indicator 8 x 2. Displays the status of the communication channels of the controller. The bottom row (green) shows the requests from the controller, and the top (red) the response from the device. When the controller channel is not

programmed for use, the controller does not poll this channel and query LED is not lit. The indicator displays the status of the following channels:
- PC – between the Fiscal Module and PTS controller;
- Disp (D) – between the PTS and other control system of petrol station or ATG system;
- User (U) – between the PTS and ATG system;
- LOG (L) – between the PTS and PC (for logging) or ATG system;
- CH 1, (1) – between the PTS and dispensers connected to channel 1;
- CH 1, (1) – between the PTS and dispensers connected to channel 2;
- CH 1, (1) – between the PTS and dispensers connected to channel 3;
- CH 4 (4) – between the PTS and columns connected to Channel 4.

- Power switch – on/off switch of power supply.
- Power supply port – type 5x2.1 connector. To connect the power supply, which comes in the package 12V 3A.
- Cash drawer port – type 2.5 Mono audio jack connector. It is used to connect the cash drawers with the appropriate connector and voltage 12V.
- Barcode scanner port – a standard USB port. Used only for barcode scanners, with the following setup:
  - serial-by-character information transfer;
- Bank terminal port – a standard COM port (DB-9M). Used for the connection of bank terminals, which operate on a standard communication protocol.
- Ethernet port – standard RJ-45 port. Used for the transmission of data to the database server and connecting the RFID card readers and firmware installations.
- Junction box port – used for the connection of junction box with the cable supplied in the package.
- Junction box (JB) – a separate block for more convenient connection of external devices to the PTS controller. Has the following ports:
  - CH 1 – to connect the fuel dispensers using the 485 protocol on channel 1;
  - CH 2 – to connect the fuel dispensers using the 485 protocol on channel 2;
  - Ch 3 – to connect the fuel dispensers using the 485 protocol on channel 3;
  - Ch 4 – to connect the fuel dispensers using the 485 protocol on channel 4;
  - DISP (485) to connect the ATG system or the parallel control system using 485 protocol;
  - DISP (485) to connect the ATG system or the parallel control system using 232 protocol;
  - LOG – to connect the ATG system, or to read the system log using a PC;
  - USER – to connect the ATG system.

Security requirements compliance

1.1 The Panel is powered by safe low voltage of DC from an external PSU, feeding from the AC network with voltage 220 V, frequency 50 Hz with an earthed neutral. **When connecting to a network without a protective grounding the electric shock is possible**. The manufacturer guarantees trouble-free and stable unit operation considering that the Panel and all its components are powered on, as well as all additional devices that have a connection with the Panel on the data channels, from a single uninterruptible power supply (UPS). Connection of other consumers to the UPS is strictly forbidden.

1.2 Please avoid the penetration of moisture inside the Panel, and PSU.

1.3 Please ensure the PSU cord and cabling of all additional devices are arranged in the way, that they are not damaged during the operation.

1.4 Power network socket should be located near the equipment with easy access to it. For the security reason, please connect the device to the power network with protective grounding only. If your outlet is not equipped with protective grounding, consult a qualified specialist.

Attention! It is prohibited to alter the network plug or use transitional devices, the use of home-made power supplies and power supplies that are designed for third-party devices!

1.5 During the installation, operation and works of all types of technical maintenance of the power supply there is the risk of electric shock. The source of the electric shock is the power transformer, which is powered on the AC network of 220V.

1.6 It is forbidden to carry out repair and maintenance works on the Panel, while its power supply unit is powered on.

1.7 The staff operating the Panel, must study this manual, and pass the certification test in the prescribed manner before the operation.

1.8 All the maintenance, examination and repair works to be held only after the power is completely off.

1.9 The disconnection of the power supply cord from the Panel during the operation is not allowed.

1.10 The operation of the Panel with open power supply or/and with cover removed is strictly prohibited.

1.11 In case of failure of the Panel during the operation, operator must stop the work, turn off the Panel, disconnect the Panel from the power and call the service specialist.

Installation and mounting

To bring remote control into operation you need to hold commissioning, which include:
- Installation of the Panel at the petrol station.
- Setting the equipment according to the specific configuration of the equipment of the petrol station.

Commissioning

Before the start of operation of the Panel user must call the representative of a service organization that has the right to provide warranty and post-warranty service and sign a corresponding agreement.

Unpacking the device

Attention! Unpacking the device after transportation at a temperature below 0°C should be done in normal conditions. Please leave the package in room conditions for at least 2 hours before opening.

Pull the Panel and the power supply unit out of the packaging. Check them visually for the absence of mechanical damage.

Attention! In case there are signs of mechanical damage, it is forbidden to switch on the Panel!

To switch on the Panel, do the following:
- If the Panel is equipped with uninterruptible power supply (UPS), switch the UPS on
- Switch on the controller of fuel dispensers (in case of supply of the controller as an external device)
- Turn on the Panel. To do this you need to turn the power switch on the rear panel to position "|".
- On the indicator of FM board the bottom diode has to light up, then top one should start flashing by series of 2 flashes.
- After some time, while self-tests are performed, the operator display backlight turns on and PANEL LOADING should appear.
- The Panel is fully loaded, when operator display shows time and date.

Keyboard

Keyboard of device is multifunctional. One or two major functions are printed on the keys. The function of each key depends on the state of the device. The location and designation of keys on the keyboard is shown in Figure 1.
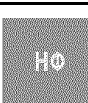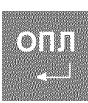
Figure 1

	CLEAR key. Usage: • To exit the menu and dialog • To clear the temporary registers (quantity, price, amount) in the mode of registration
	Digital keyboard. Usage: • To enter the appropriate numbers. • To select the appropriate menu item or dialogue • To enter characters, tagged with upper shortcuts, when you type the names (of goods, containers, etc.) • To perform macro sequences (as speed dial keys), if the [NB] key was pressed before.
	The point key. Used to enter commas and dots in numbers and product names.
	The "double zero" key. Used to enter a double zero in numbers.
	The RCT key – run of the receipt printing tape. Used to run the paper in the receipt printer for several lines
	The Cart key. Usage: • To switch to the shopping cart display mode from the fueling places display mode. • To select the number of the current shopping cart

ПРК	The FP key. Usage: • To switch to the fueling places display mode from the shopping cart display mode. • To add fuel sales (in the mode of displaying the shopping cart) to the shopping cart
◀ АН	The CANCEL key. Usage: • To cancel the last product operation in the current shopping cart. • To clean the shopping cart with [ST] key previously pressed. • To delete the last character when entering a number or a string.
КТ ШК	The CG key – code of the goods. Usage: • To add goods for sale by the code to the shopping cart. • To add to the shopping cart goods for sale by manually entering the bar code (previously hold [NB] key).
X ЦІНА	The X key – a sign of quantity/price. Usage: • For fixing the number of goods or fuel to the temporary registers. • For fixing the price of product or fuel to the temporary registers when previously hold [NB] key.
СУМА	The SUM key. Used for fixing the amount of sales of product or fuel to the temporary registers. Is used primarily when ordering fuel for preset money amount.
▲ − % + %	The discounts/markups key. Usage: • To add interest discounts to the shopping cart. • To add the interest margin to the shopping cart (previously hold [NB]). • To select the previous menu or dialog. • To select the fueling place while in fueling place display mode.
▼ − +	The absolute (total) discount/markup key. Usage: • To add absolute discounts (with previously entered value) to the shopping cart. • To add the absolute margin to the shopping cart (with previously entered value and hold down [NB]). • To select the next menu or dialog. • To register the removal of cash from the cash drawer in the mode of displaying the shopping cart. • To register the contribution of cash into the cash drawer in the mode of displaying the shopping cart (if previously hold [NB]). • To select the fueling place while in fueling place display mode.

ПС	The PS key – subtotal. Usage:
	• Subtotal mode on/off. In the subtotal display mode, the amount for each position in the current shopping cart and total cart amount is displayed. In the subtotal display mode:
	    ● Upon cancellation – the total shopping cart is cleared.
	    ● When adding discounts/markup – discounted price is charged on previous total.
	• Perform a function with previously entered number (See Appendix 1).

ПУСК	The START Key. Used to start the dispensing of the order on the selected fueling place.
СТОП	The Stop key. Used to stop the dispensing of the order on the selected fueling place.
НФ	The LF key – lower function. Used to activate the functions that are labeled on the keyboard at the bottom of the main features. For example the sequence [LF] [X/PRICE] activates the function PRICE.
► МЕНЮ	The MENU Key. Indicated in the text of this document as [MENU]. Usage: ● To display the menu ● In the menu and the dialog for entering the next level of the hierarchy of menu or dialog.
ФС	The FP key – a form of payment. Used to select the form of payment for the shopping cart.
КРТ	The CC key – the credit card. Used for the payment with credit card.
ОПЛ ↵	The PAY key – the payment. Usage: • Used for the payment with cash. • To confirm the selected menu item and dialog. • To confirm the input of numbers and strings.

Operator display

LCD digital-character operator display. Used to display the information on fuel and related products sales, as well as display various dialogs when setting up the device and performance reports, and other operations.

The Panel can work in different modes and depending on the mode of operation, the information on the display changes accordingly.

START SCREEN mode

1 9 . 0 7 . 1 6 1 3 : 1 3 : 1 8	The date and time
V 1 – C o n t r o l p a n e l	Software version

The start screen is displayed after the start of the Panel, when you press the key. When the user is not registered and upon user logout.

This mode displays the date, time and version of the software.

To exit this mode, do the following: Press the **опл** key, in this case the display shows the menu of user selection. **▲ −% +%** key, or **▼ +** key, or **опл** key will display the Main menu, if you press the number key, which figure corresponds to the number of the menu item in the Main menu, it will immediately enter the appropriate menu item.

The Dialog menu mode.

S E T U P	Menu name
0 E X I T	Normal item
1 NAME of fuel type	Item with
2 [ ] ENABLED	Item with enabler
3 – THE FORM OF PAYMENT	Inactive item
4 PRICE 12.12 _	Item with the input
5 (*) On	Item with the switch
6 ( ) Off	
CONNECTIONS 0	Item with comment
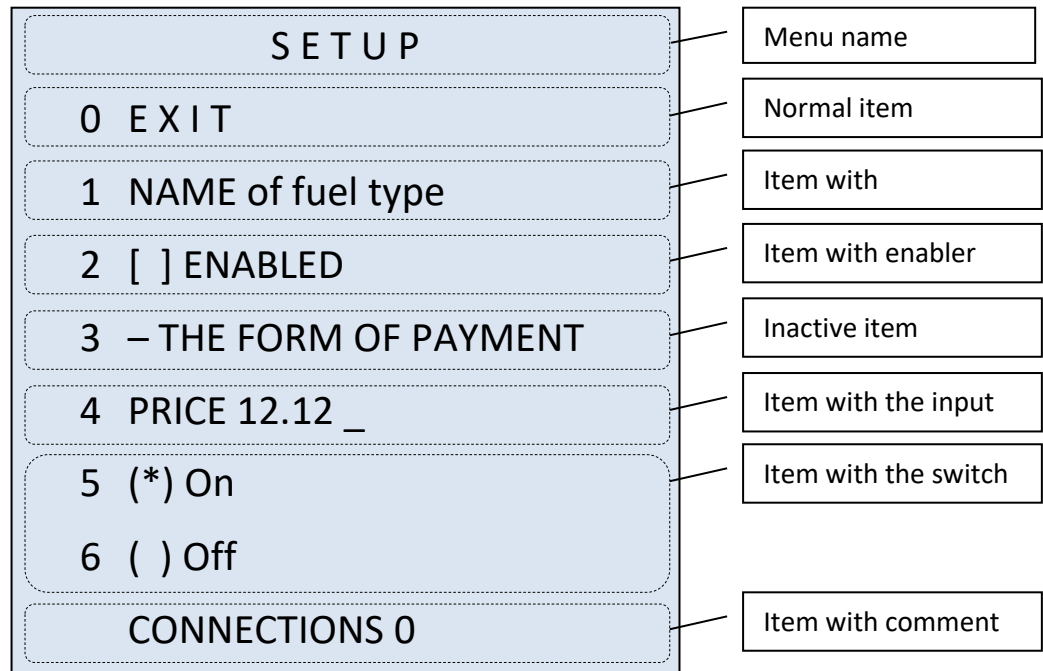
This mode is used to display the available functions of the Panel and easy access them. Flashing symbols ">>" "<<" on the display label selected menu item. Each menu item has its own index. Menu navigation is done using [▲ –% +%] and [▼ – +] keys. Activate the selected item by using the [ОПЛ ↵] key. The quick access to required menu item is also available – you need to press a number key, which figure corresponds to the number of the desired menu. To enter the number of the menu item, which consists of the two characters you need to press [,] key before entering the number. **To save the changes made in the menu, select the last item in the menu – "Confirmation".**

The possible menu items:

<u>The name of the menu</u> displays the name of the menu where you are currently located. Can have more than one row. This item is not selectable.

<u>Normal item</u> – contains the number of item in the menu and the name of the function that will be executed when you activate this menu item or a submenu name to enter into. Activate the selected item by using the [ОПЛ ↵] key.

<u>Item with comment</u> – unlike normal item also contains a comment. If the length of the comment is longer than the space available, then information is displayed as a ticker. Usually when you activate this menu item, it takes to the dialog of change of the data, that appears in a comment.

<u>Item with enabler</u> – contains the serial number, the name of the item and displays the status of the item (enabled/disabled), which is composed of the square brackets and the "+" between them. The presence of character between the square brackets means that the item is activated, and if the character is missing, then the item is disabled. When you activate this item, the respective function usually is turned on, and if there are inactive fields after this menu item, they become active. Sometimes when you activate such item, it opens a submenu where this feature is enabled.

<u>Inactive item</u> – this item has "-" character instead of the menu serial number. This item is not selectable, it will be skipped. After activating the function that uses this item (this is usually done by "Item with enabler"), the item automatically becomes the "Normal item".

Item with input – this item consists of a serial number, the title, and the cursor, which appears when this item is selected. The data in this item can be edited. To clear the data press ◀AH and enter new data with the digit keys. For input confirmation press ОПЛ↵.

Item with switch consists of a menu number, the name and status display field. This item may not be the only one on the menu, because it is a part of menu selection of one of multiple items. Status field consists of a round brackets and stars between them. The field which has an asterisk in the round brackets is selected. Thus, the menu with items with the switch will have only item with the asterisk in round brackets activated.

Item with comment – this paragraph has no number and is designed for displaying additional information. May consist of multiple rows. You can not select this item. If the number of rows exceeds the display size, then you can scroll them using the ▲−%+% and ▼−+ keys.

Data entry dialog mode.

```
        1    PETROL                      Dialog description

  PRICE: 2 5. 9 9

  VOLUME: _                             The input fields
  AMOUNT:
```
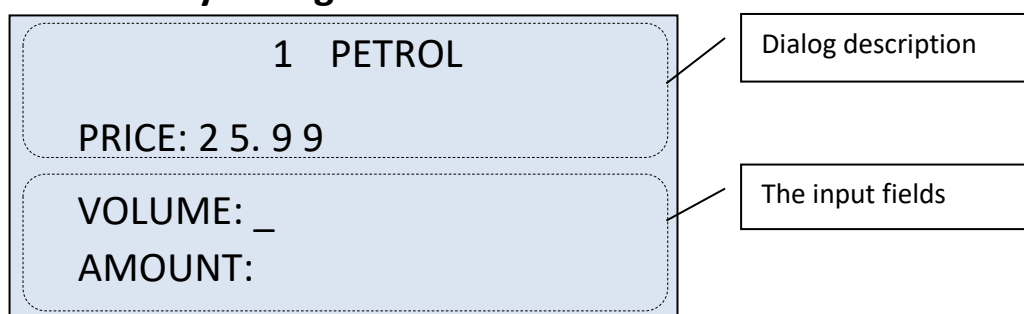
This mode displays the dialog for data input. There may be several rows for data input. When item has multiple rows, the data are taken only from the row that is edited. The transition between the rows is done with ▲−%+% and ▼−+ keys. To save input you need to press the ОПЛ↵ key. To cancel the input you can press ⏻C or ▶МЕНЮ keys.

Description of the dialog – displays information about the data that you need to enter.

The input field is composed of the query and the field for input. The input field also contain already filled information. In order to erase data you must press the ◀AH key. Use the numeric keypad to enter the data.

If the information must contain the text, for input also use the numeric keyboard. The number of clicks on the button will match the number of required letter. To toggle the case use ▲−%+% key for upper case, ▼−+ for lower case. To enter special characters use the "0" key, the characters are dependent on the case.

The mode of SHOPPING CART

```
    1 [ + P = 4 = = - ? ] 8          Status bar of all
                                      Dispensers

  1.  1 0. 0 0 x 1 3 . 8 8           The contents of the
  DIS1 PET 1 3 8. 8 0
                                      The number of
                                      current shopping cart
  The status bar of
  orders per cart (by
```
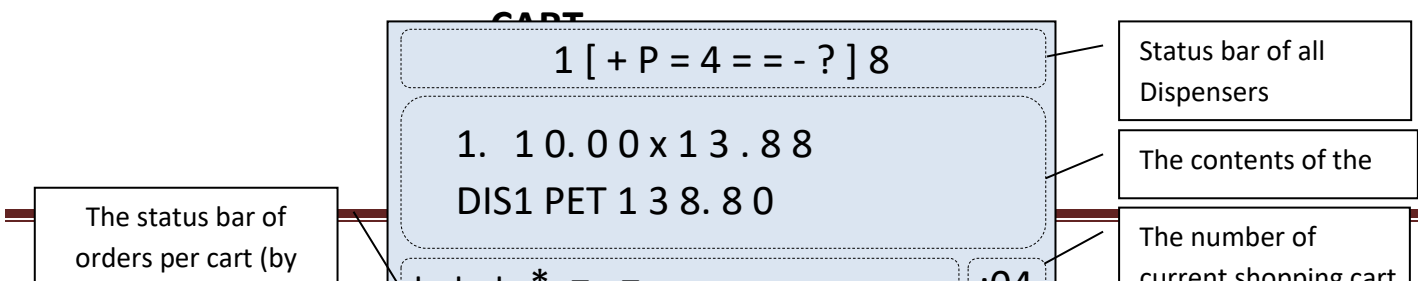
1. <u>Dispenser status bar</u> – displays the status of each dispenser. Consists of a number of first and last dispensers and separates the characters of states with square brackets. Each character displays the status of one dispenser (for example, if there are 8 units, so there are 8 characters). Matching characters of dispenser state are shown in the table:

Table 1 – Symbols of dispenser's state

The symbol of dispenser's state	Meaning
?	This dispenser is not configured.
-	No link to the dispenser or it is incorrectly configured.
=	Connection established, nozzles idle.
=/{dispenser #}	Nozzle up on current dispenser. Shopping Cart mode.
= / К	Nozzle up on current dispenser. Dispenser mode.
= / Х	The Panel sent a request and is waiting for response from dispenser.
! /Е	Nozzle number does not correspond to the order.
+ / Г	Start command sent, but nozzle is not lifted.
+ / Р	Fuel dispensing in progress.
= / +	Fuel dispensing completed. Wait to close order.
= / А	Automatic dispensing on, nozzle is not lifted.
=/ А /{dispenser#}	Nozzle up in automatic dispensing mode

2. <u>The contents of Shopping Cart</u> – displays the current order in the shopping cart. Consists of the goods position number in the shopping cart, the quantity, the price, the name of the product (if it is the fuel, then the name of dispenser and abbreviated title of fuel) and the amount, which corresponds to a given quantity of goods (fuel). Also the shopping cart shows discounts/supplements, and partial payment for the goods can also be shown.

3. <u>The number of the current shopping cart (dispenser) –</u> displays the number of cart (number of cart matches the number of the dispenser), which is currently displayed. When [пс] key is pressed, the total amount of money for all the items in the cart is shown instead of the cart's number.

4. <u>The status bar in the shopping carts (by dispenser) –</u> displays the status of each cart (by dispenser). The number of the character in the row (from left to right) corresponds to the number of the shopping cart. The possible states of the shopping cart are shown in the table:

Table 2 – The symbols of the state of the shopping cart

The symbol of the state of the shopping cart	Meaning
	Cart empty, no order.
+	Open order in the inactive shopping cart.
=	Open and paid order in an inactive shopping cart (not processed)
*	Open order in the current shopping cart.
= / *	Open and paid order in the current shopping cart.

Dispenser mode

List of dispensers

Dispenser status bar

```
3  + = -- -- -- -- -- -- --  1 2 . 9 0
[ 4 ]  К  G A Z            1 5 . 00
                              00
5  = = -- -- -- -- -- -- --  1 6 . 4 5
```

The status bar of orders per cart (by dispenser)

The number of current shopping cart (dispenser), or total in
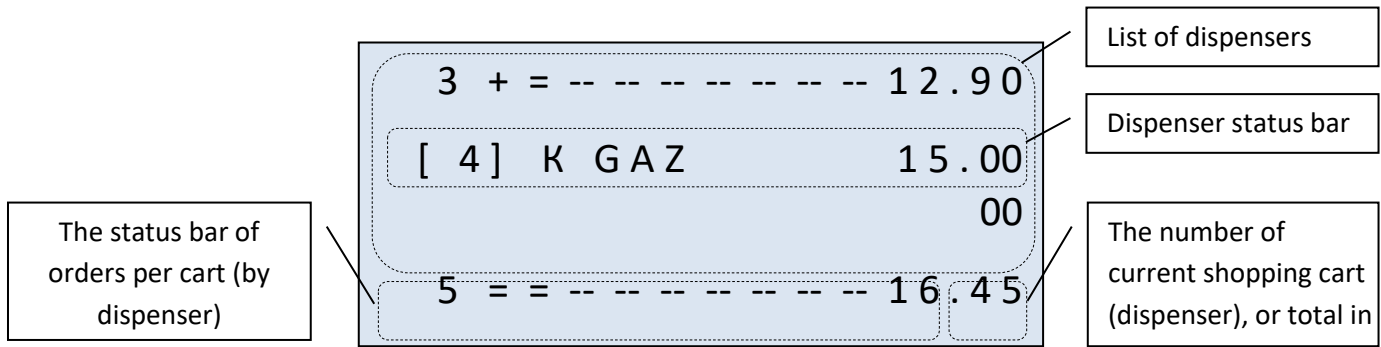
1. <u>List of dispensers</u> – consists of rows of a dispensers condition, programmed in the Panel. To navigate between rows press ▲ up and ▼ down keys. Active row is marked with square brackets that include the number of dispenser.
2. <u>Dispenser status bar</u> – displays information on the current dispenser. Consists of the following:

 # of

```
[ 4 ] *  К  G A S            1 5 . 00
```

The volume of the last order

Shopping cart

Dispenser

Fuel type/amount of money
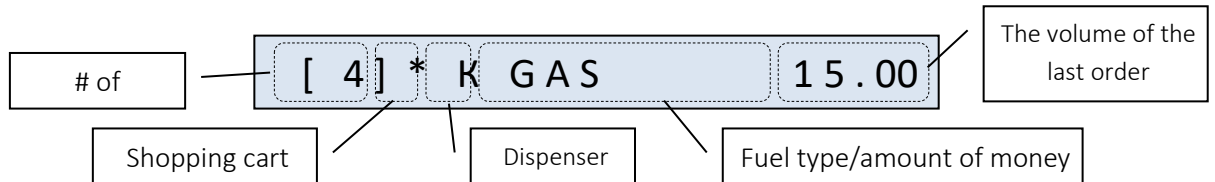
Table 3 – explanation of the dispenser status bar

The name of the row element	Meaning
# of dispenser	The figure, which corresponds to the number of the dispenser. If this figure is in the square brackets (e.g. "[4]"), this means that the subsequent operations with the delivery of fuel will be made for this dispenser.
Shopping cart status	Displays the status of the order for the shopping cart, fixed to the current dispenser. Explanation of the statuses is provided in table 2.
Dispenser status	Displays the status of dispenser. Explanation of the statuses is provided in table 1.
Fuel type/amount of money	Displays the abbreviated name of the fuel for the current active nozzle. If the nozzle is not lifted, "-" is shown. While pressing the пс key, the total amount of money for the latest order is displayed instead of fuel name.
The volume of the last order	Displays the amount of allotted fuel for the last order.

3. <u>The number of the current shopping cart (dispenser), the status bar in the shopping cart (dispenser)</u> – the same as in the "Shopping cart" mode.

Dispenser calibration mode

```
                DISPENSER CALIBRATION          ┐── Mode name
  [ 4 ] C К  G A S              1 5 . 00       ┐── Dispenser status bar
                                     00
                                               ┐── List of dispensers
    5     = -- -- -- -- -- -- --  1 6 . 4 5
```
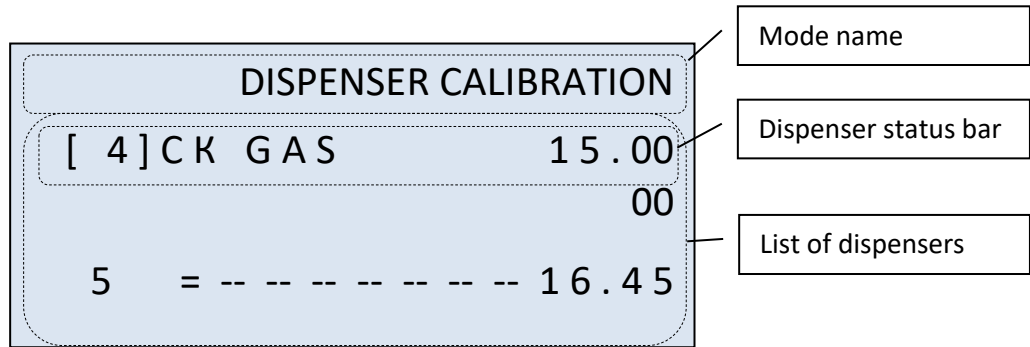
This mode is designed for the calibration test of fuel dispensing. This mode is the same to the dispenser mode, but instead of shopping cart display, this mode can only display "C" character. This means that the fuel dispensing was started by dispenser, marked with this character. When dispensing is finished, complete verification process by pressing the **ОПЛ ←** key for each dispenser selected.

To exit this mode use **▶ МЕНЮ** key only.

THE PANEL MENU STRUCTURE

ГОЛОВНЕ МЕНЮ

| 1 РЕЄСТРАЦІЯ | 2 ПАЛИВО | 3 ЗВІТ | 4 ПРОГРАМУВАННЯ | 5 СЕРВІС | 6 ЗВ'ЯЗОК З ПК |

1 РЕЄСТРАЦІЯ
- РЕЖИМ „КОШИК"
- РЕЖИМ „ПРК"
- РЕЄСТРАЦІЯ

2 ПАЛИВО
- 1 НАДХОДЖЕННЯ
- 2 ЗАЛИШКИ
- 3 ЦІНА
- 4 ПОВІРКА ПРК

3 ЗВІТ
- 1 Х-ЗВІТ
- 2 Z-ЗВІТ
- 3 ЗВІТ З ФІСКАЛЬ
- 4 ЗВІТ ПО ТОВАРАХ
- 5 ЗВІТ ПО ТОВАРНИ
- 6 ЗВІТ ПО ВІДДІЛАХ
- 7 ЗВІТ ПО ЕМІТЕНТА
- 8 ЗВІТ ПО КРАНАХ
- 9 ЗВІТ ПО УГОДАМ

4 ПРОГРАМУВАННЯ
- 1 ВІДДІЛИ
- 2 ТОВАРНІ ГРУПИ
- 3 ТОВАРИ
- 4 ШТРИХ-КОДИ
- 5 РЕЗЕРВУАРИ
- 6 ЗАПРИВОЧНІ МІСЦ
- 7 ПОДАТКОВІ ГРУПИ
- 8 ЕМІТЕНТИ
- 9 УГОДИ
- 10 КЛАВІШІ ШВИДКО

5 СЕРВІС
- 1 СТАН
- 2 РЕКВІЗИТИ ВЛАСН
- 3 ФІСКАЛІЗАЦІЯ
- 4 КСЕФ
- 5 НАЛАШТУВАННЯ
- 6 ТЕСТУВАННЯ

РЕЄСТРАЦІЯ
- 1 ПРОГОН ПАПЕРУ
- 2 ВІДКРИТИ СКРИНЬКУ
- 3 УПРАВЛІННЯ ЗМ
- 4 ВИБІР КОШИКА
- 5 ТОВАРНА ОПЕРАЦІЯ
- 6 ОПЛАТА КОШИКА
- 7 АНУЛЮВАННЯ
- 8 СЛУЖБОВА ВИДАЧА
- 9 СЛУЖБОВЕ ВНЕСЕННЯ
- 10 КОПІЯ ЧЕКУ
- 11 РОЗРЕЄСТРАЦІЯ
- 12 САМООБСЛУГОВУВАННЯ

НАЛАШТУВАННЯ
- 1 ДАТА ТА ЧАС
- 2 КОНТРОЛЕРИ
- 3 КОРИСТУВАЧІ
- 4 КСЕФ
- 5 МЕРЕЖА
- 6 ДОДАТКОВІ МОДУЛІ

Figure – the main menu structure

Menu of the Panel has hierarchical structure. Top level is Main Menu, which consists of six points. The functions of the items are described in the table below.

Item title	Function
REGISTRATION	The entrance to the sales mode.
Shopping cart	Allows to do sales and other product related operations
Dispenser mode	Displays sales by dispenser. Fuel sales may proceed but not recommended
REGISTRATION	Menu to perform all operations in the dialog mode
FUEL	The entrance to the menu for all operations with fuel
RECEIPT	Calls up the fuel receipt dialog
REMAINS	Calls up the dialog of storage tanks fuel remains adjustment
PRICE	Calls up the dialog to change fuel prices
DISPENSER CALIBRATION	Enables the dispenser calibration mode
REPORTS	Opens menu for reports
X-REPORT	Daily reports
Z-REPORT	Daily report with reset
THE REPORT OF FISCAL MEMORY	Opens the menu for reports from fiscal memory
PRODUCTS REPORT	Executes the report by product codes, before reset only
REPORT ON PRODUCT GROUPS	Executes the report by product groups, before reset only
REPORT ON DEPARTMENTS	Executes the report by departments, before reset only
REPORT BY EMITTER	Executes the report by emitters, before reset only
REPORT ON NOZZLES	Executes the report by all nozzles of all dispensers, before reset only
REPORT ON CONTRACTS	Executes the report by sales made under contracts, before reset only
PROGRAMMING	The entrance to the menu for the implementation of programming device
DEPARTMENTS	Opens the menu for programming the departments configuration
PRODUCT GROUPS	Opens menu for product groups configuration
PRODUCTS	Opens the programming menu for configuration of goods
BARCODES	Opens the menu for programming the barcodes
STORAGE TANKS	Opens the menu for programming storage tanks configuration
FUELING PLACES	Opens the menu for programming dispensers configuration
TAX GROUPS	Opens the menu for programming the tax groups configuration
EMITTERS	Opens the menu for programming the emitters
AGREEMENTS	Opens the menu for programming the agreements
SPEED DIAL KEYS	Opens the menu for programming the speed dial keys
SERVICE	Opens the menu of service features and special settings
STATUS	Menu to check the status of the device
OWNER DETAILS	Appears on the printed receipt header
FISCAL MODE	Sets the Panel into fiscal mode.
КСЕФ	Menu to perform the functions associated with the electronic tape
SETTINGS	Opens the menu with special settings
TESTING	Runs technological tests on the Panel
PC CONNECTION	Sets the operation mode to a PC connection mode using service software

Please also study the menu "REGISTRATION" and "SETTINGS" in this table below.
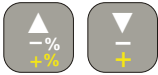
Item title	Function
REGISTRATION	
PAPER RUN	Several steps required to run the paper tape
OPEN THE CASH DRAWER	Sends OPEN command for a cash drawer, if it is connected
DISPENSER CONTROL	Executes "start" and "stop" commands
SHOPPING CART SELECTION	Opens dialog to select the shopping cart
PRODUCT OPERATION	Opens the menu to perform product operations
SHOPPING CART PAYMENT	Proceed a partial or full payment of the shopping cart
CANCELLATION	Cancel the last payment operation or the total shopping cart. In case that the sale operation was not completed, and the payment was not made.
SERVICE CASH WITHDRAWAL	Execution of the service cash withdrawal
SERVICE CASH DEPOSIT	Execution of the service cash deposit
A COPY OF THE RECEIPT	Prints copy of the last receipt
LOGGING OUT	Log out the cashier from the system
SELF-SERVICE	Opens menu for the self-service mode configuration.

Item title	Function
SETTINGS	
THE DATE AND TIME	Setting the date and time on the Panel
CONTROLLERS	Fuel dispensers and ATG systems controller configuration
USERS	User settings configuration menu
КСЕФ	Меню налаштування параметрів електронної стрічки
NETWORK	Network settings configuration (to apply changes, please reboot the Panel)
ADDITIONAL MODULES	Additional modules configuration

PROGRAMMING AND OPERATION OF THE PANEL
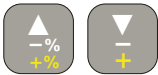
Fuel receipt

To enter data on the flow of fuel to the tank into the Panel, follow these steps:

1. Using **MEHIO** ▶ key exit to **MAIN MENU**, then enter to **2 FUEL** — **1 RECEIPT**.
2. Using ▲ −% +% ▼ − + select the type of fuel, you need to update and press **ОПЛ** ↵.
3. Enter the quantity of fuel received and press **ОПЛ** ↵.
4. To save the data, select **2 CONFIRMATION** and press **ОПЛ** ↵, otherwise the entered data will not be saved.
5. If everything was done correctly, a receipt is printed with the data on the flow of fuel. After that, the next type of fuel can be selected. To exit the Fuel receipt menu, press **⏻ C**.

Correcting the information on remaining fuel
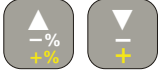
To edit information about fuel remains in the tank follow these steps:

1. Using **MEHIO** ▶ key exit to **MAIN MENU**, then enter to **2 FUEL** — **2 REMAINS**.
2. Using ▲ −% +% ▼ − + select the type of fuel, you need to update and press **ОПЛ** ↵.
3. If the ATG system is connected to the panel, then select **1 ATG LEVEL** and press **ОПЛ** ↵, then the data on the fuel level will be scanned and automatically entered into paragraph 2 of this menu.
4. Select item 2 of this menu and enter the number of remaining fuel and press **ОПЛ** ↵.
5. To save the data, select **3 CONFIRMATION** and press **ОПЛ** ↵, otherwise the entered data will not be saved. After that, the next type of fuel can be selected. To exit the menu, press **⏻ C**.

Fuel price change
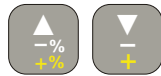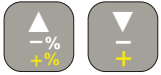
To change the price of fuel, follow these steps:

1. Using **► МЕНЮ** key exit to **MAIN MENU**, then enter to **2 FUEL** — **3 PRICE**.

2. Using **▲ −% +%** **▼ − +** select the type of fuel, you need to change the price for and press **ОПЛ ←**.

3. Enter the new price value and press **ОПЛ ←**.

4. To save the data, select **2 CONFIRMATION** and press **ОПЛ ←**, otherwise the price entered will not be saved. After that, the next type of fuel can be selected. To exit the menu, press **⏻ C**.

Dispenser calibration

To perform the calibration follow these steps:

1. Using **► МЕНЮ** key exit to **MAIN MENU**, then enter to **2 FUEL** — **4**.

2. Choose using **▲ −% +%** **▼ − +** the dispenser for calibration.

3. Press **ПУСК**, and select using **▲ −% +%** **▼ − +** the nozzle to perform the calibration and press **ОПЛ ←**.

4. Enter the required volume of fuel or using **▼ − +**, go to item "Amount" and specify the amount of money to perform calibration for. Press **ОПЛ ←** key.

5. At the number of dispenser the letter "C" appears, it means that this dispenser has entered the calibration mode (service mode) and has begun dispensing fuel. When the dispensing of fuel finishes, press **ОПЛ ←** to close the calibration procedure on this dispenser. As a result, the service receipt will be printed with the calibration data for dispenser calibrated, and the letter "C" at the number of dispenser disappears.

If the calibration operation will not be completed (this is evidenced by the letter "C" at the number of dispenser), dispenser remains in calibration mode and dispensing in any mode for this dispenser will be suspended.

Reporting

For performance reports, as well as to perform other operations, key sequences may be used to quickly enter the specific menu item, or to perform a particular operation. For example:

- **ЬЭЫЪ 3** **ФХЦЧ TUV 1** **ПС** combination prints X-report;

- **3 2 1 ПС** combination prints Z-report;
- **3 3 1 ПС** combination prints fiscal memory report by date;
- **3 3 2 ПС** combination prints fiscal memory report by number;
- **3 4 ПС** combination prints report of products (articles);
- **3 5 ПС** combination prints report of product groups;
- **3 6 ПС** combination prints report of departments;
- **3 7 ПС** combination prints report of emitters.
- **3 8 ПС** combination prints report of dispensing nozzles.
- **3 9 ПС** combination prints report of contracts.

Reports may also be printed via menu. To do this, press **МЕНЮ** to enter **MAIN MENU**, then enter **3**, where:

1. **1 X-** – prints X-report.
2. Press **2 Z-**, then select **1 YES** - prints Z-report.
3. In the item **3 FISCAL MEMORY REPORT**, where

   - select **1 BY DATE** or **2 BY NUMBER** and press **ОПЛ** key;
   - If at **1 [+] SHORT** item has the "+" in square brackets, the shortened report is printed.

     To print the full report, select item 1 and press **ОПЛ**. If there is no "+" in square brackets, the full report is printed;
   - In the 2 and 3 please indicate the boundaries of receipts range, you need to report;
   - Select **4 CONFIRMATION**, and the desired report is printed.
4. **4 PRODUCT REPORT** – prints the report on product articles.
5. Item **5 PRODUCT GROUPS REPORT**
6. Select **6 DEPARTMENTS**.
7. Select **7 EMITTERS REPORT**.
8. Select **8 DISPENSER NOZZLES**.
9. Select **9 CONTRACTS**.

Programming departments

Before programming parameters for departments, you can review the current parameters. To do this:

1. Using **[▶ МЕНЮ]** go to **MAIN MENU**, then go to **4 PROGRAMMING** - **1** - **2 VIEW**. You can view the departments information on the display or print it.

2. If you want to view the information on the display, you need to select **1 DISPLAY** and press **[ОПЛ ←]**. In this case, the display will show information in rows, to view the next row press **[▼ − +]**. To quit review mode, press **[⏻ C]** or **[ОПЛ ←]**.

3. If you want to view the information printed, you need to select **2 PRINTER** and press **[ОПЛ ←]**. In this case, a receipt is printed with all information on programmed departments.

To edit the information on departments, follow these steps:

1. Using **[▶ МЕНЮ]** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **1** - **1 PROGRAM**

2. Enter the code of department, you want to change and press **[ОПЛ ←]**.

3. If necessary, select item "1 CODE # 1" and enter the code you want to save data on the department.

4. Select **2 TITLE XX...** and enter the name of the department (the maximum allowed 27 characters) and press **[ОПЛ ←]**.

5. To save your input select **3 CONFIRMATION** of this menu. Otherwise your input will not be stored.

You can also erase the department data.

To remove the data of specific department, press **[▶ МЕНЮ]** to go to **MAIN MENU**, then go to **4 PROGRAMMING** - **1** - **3 DELETE** and enter the code of department that you want to delete and press **[ОПЛ ←]**.

To delete the data of all departments, press **[▶ МЕНЮ]** key to go to **MAIN MENU**, then go to **4 PROGRAMMING** - **1** - **4 DELETE ALL** - **1 YES**.

Programming the product groups

Before programming product groups, you can review existing groups. To do this:

4. Using ▶ **МЕНЮ** go to **MAIN MENU**, then go to **4 PROGRAMMING** - **2 PRODUCT** - **2 VIEW**. You can view the product groups information on the display or print it.

5. If you want to view the information on the display, you need to select **1 DISPLAY** and press **ОПЛ** ↵. In this case, the display will show information in rows, to view the next row press ▼+. To quit review mode, press ⏻ **C** or **ОПЛ** ↵.

6. If you want to view the information printed, you need to select **2 PRINTER** and press **ОПЛ** ↵. In this case, a receipt is printed with all information on programmed product groups.

To edit the information on product groups, follow these steps:

6. Using ▶ **МЕНЮ** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **2 PRODUCT** - **1 PROGRAM**

7. Enter the code of product group, you want to change and press **ОПЛ** ↵.

8. If necessary, select item **1 CODE ##** and enter the code you want to save data on the product group.

9. Select **2 TITLE XX...** and enter the name of the product group (the maximum allowed 27 characters) and press **ОПЛ** ↵.

10. To save your input select **3 CONFIRMATION** of this menu. Otherwise your input will not be stored.

You can also erase the product group data.

To remove the data of specific product group, press ▶ **МЕНЮ** to go to **MAIN MENU**, then go to **4 PROGRAMMING** - **2 PRODUCT** - **3 DELETE** and enter the code of product group that you want to delete and press **ОПЛ** ↵.

To delete the data of all product groups, press **▶ МЕНЮ** key to go to **MAIN MENU**, then go to **4 PROGRAMMING** - **2 PRODUCT** - **4 DELETE ALL** - **1 YES**.

Programming products

Before programming product parameters, you can review existing products. To do this:

1. Using **▶ МЕНЮ** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **3** - **2 VIEW**. You can view the products information on the display or print it.

2. If you want to view the information on the display, you need to select **1 DISPLAY** and press **ОПЛ ←**. Then select item **1 3** and enter the number of product to view. Then select item **2 PO** and enter the number of product to view. Select item **3 CONFIRMATION**. In this case, the display will show information in rows, to view the next row press **▼ − +**. To quit review mode, press **⏻ С** or **ОПЛ ←**.

3. If you want to view the information printed, you need to select **2 PRINTER** and press **ОПЛ ←**. Then select item **1 3** and enter the number of product to view. Select item **2 PO** and enter the number of product to view. Select item **3 CONFIRMATION**. In this case, a receipt is printed with all information on programmed products.

To edit the information on products, follow these steps:

1. Using **▶ МЕНЮ** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **3** - **1 PROGRAM**.

2. Enter the code of product, you want to change and press **ОПЛ ←**.

3. If necessary, select item **1 CODE ##** and enter the code you want to save data on the product.

4. Select **2 PRODUCT GROUP** and enter the code of product group to store the product to.

5. Select **3** and enter the code of department to store the product to.

6. Select **4 TITLE XX...** and enter the name of the product (the maximum allowed 27 characters) and press **ОПЛ ←**.

7. Select **5 TAX GROUP 1**, then select the item with the letter of tax group to store product to, and press **ОПЛ ↵**. Select item **7 CONFIRMATION**.

8. Select **6 TAX GROUP 2**, then select the item with the letter of tax group to store product to, including first tax group and press **ОПЛ ↵**. Select item **8 CONFIRMATION**.

9. Select **7** item and set the following attributes:

   ● Select **1 POINT POSITION #**. Enter the number of digits after the point.

   ● Select **2 [ ] APD**. If you do not want the Panel to control the balance of products, and allow to sell even if its quantity is below 0, select item and press **ОПЛ ↵**;

   ● Select **3 [ ] TNK**. If you want the balance of goods considered as the actual amount of fuel in the tank, this product use, then select the item and press **ОПЛ ↵**,

   ● Item **4 [ ] PAC** – packaging. Not used

   ● To save selected attributes, select item **5 CONFIRMATION** and press **ОПЛ ↵**.

<u>For the fuel the parameter 3 RES can be set only.</u>

10. Select item **8 PRICE XXX.XX**, enter the product price and press **ОПЛ ↵**.

11. Select **9 QUANTITY XXXX** and enter the number of the remaining goods (in case of fuel sales do not specify the amount, because it will be taken from the storage tank parameters).

12. To save your input select **10 CONFIRMATION** of this menu. Otherwise your input will not be stored.

You can also erase the product data.

To delete the data of products, press **▶ МЕНЮ** key to go to **MAIN MENU**, then go to **4 PROGRAMMING** - **3** - **3 DELETE**. Then select item **1 3** and enter the number of product to delete. Select item **2 PO** and enter the number of product to delete. Select item **3 CONFIRMATION**.

Programming the barcodes

Before programming new barcodes into the Panel, you can review existing data. To do this:

1. Using **▶ МЕНЮ** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **4 BARCODES** - **2 VIEW**. You can view the barcodes information on display or print it.

2. If you want to view the information on the display, you need to select **1 DISPLAY** and press **ОПЛ ↵**. In this case, the display will show information in rows, to view the next row press **▼ − +**. To quit review mode, press **⏻ С** or **ОПЛ ↵**.

3. If you want to view the information printed, you need to select **2 PRINTER** and press **ОПЛ ↵**. In this case, a receipt is printed with all information on programmed barcodes.

To edit existing barcodes, please follow the procedur below:

1. Using **▶ МЕНЮ** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **4 BARCODES** - **1 PROGRAM**.

2. Enter the barcode with keyboard or scanner and press **ОПЛ ↵**.

3. Select item **2 BARCODE** and press **ОПЛ ↵**. Then enter the product code or using the **▲ −% +%** and **▼ − +** keys select the product name and press **ОПЛ ↵**.

4. To save your input select **3 CONFIRMATION** of this menu. Otherwise your input will not be stored.

You can also delete existing barcodes.

To delete the barcode, go to **MAIN MENU**, then go to **4 PROGRAMMING** - **4 BARCODES** - **3 DELETE**, enter the desired barcode from keyboard or scanner, and press **ОПЛ ↵**.

To delete the data of all barcodes, press **▶ МЕНЮ** key to go to **MAIN MENU**, then go to **4 PROGRAMMING** - **4 BARCODES** - **4 DELETE ALL** - **1 YES**.

Tax groups

Before programming tax groups, you can review existing groups. To do this:

1. Using **►МЕНЮ** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **7 TAX GROUPS** - **2 VIEW**. You can view the tax groups information on display or print it.

2. If you want to view the information on the display, you need to select **1 DISPLAY** and press **ОПЛ ←**. In this case, the display will show information in rows, to view the next row press **▼ − +**. To quit review mode, press **⏻ C** or **ОПЛ ←**.

3. If you want to view the information printed, you need to select **2 PRINTER** and press **ОПЛ ←**. In this case, a receipt is printed with all information on programmed tax groups.

To change tax rates:

To change these settings, the user must have appropriate rights.

It is necessary to execute Z-report before you change settings.

Tax group E (no VAT) is fixed group, its settings are not editable.

1. Using **►МЕНЮ** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **7 TAX GROUPS** - **1 PROGRAM**.
2. Select the tax group for edit.
3. Select the type of tax group:
   - **1 (*) NO** - this tax group will not be used;
   - **2 (*) VAT** - the item **4 RATE** becomes active, you have to enter the VAT rate in percentage (e.g. 20 for 20% VAT rate);
   - **3 (*) NO VAT** - this tax group will be used when VAT is not applicable;
4. Select menu item **4 RATE XX.XX**, where you can erase existing data with **◄ AH** key. Enter the tax rate and press **ОПЛ ←** to confirm.

5. Select item **5 TAX NAME** and press **ОПЛ ←**. You can erase existing data with **◄ AH** key. Enter the tax rate and press **ОПЛ ←** to confirm.

6. To save your input select **6 CONFIRMATION** of this menu. Otherwise your input will not be stored.

Programming emitters

Before programming parameters for emitters, you can review the current parameters. To do this:

1. Using **► МЕНЮ** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **8 EMITTERS** - **2 VIEW**. You can view the emitters information on the display or print it.

2. If you want to view the information on the display, you need to select **1 DISPLAY** and press **ОПЛ ←**. In this case, the display will show information in rows, to view the next row press **▼ − +**. To quit review mode, press **⏻ C** or **ОПЛ ←**.

3. If you want to view the information printed, you need to select **2 PRINTER** and press **ОПЛ ←**. In this case, a receipt is printed with all information on programmed emitters.

To edit the information on emitters, follow these steps:

1. Using **► МЕНЮ** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **8 EMITTERS** - **1 PROGRAM**.

2. Enter the code of emitter, you want to change and press **ОПЛ ←**.

3. If necessary, select item **1 CODE ##** and enter the code you want to save data on the emitter.

4. Select **2 TITLE XX...** and enter the name of the emitter (the maximum allowed 27 characters) and press **ОПЛ ←**.

5. Select item **3 PAYMENT FORM** and press **ОПЛ ←**. Using **▲ −% +%** **▼ − +** keys select the menu item, that corresponds to the form of payment for the current emitter and press **ОПЛ ←**. Then select item **9 CONFIRMATION** to confirm the form of payment.

6. To save your input select **4 CONFIRMATION** of this menu. Otherwise your input will not be stored.

You can also delete the emitter data.

To remove the data of specific emitter, press **[► МЕНЮ]** to go to **MAIN MENU**, then go to **4 PROGRAMMING** - **8 EMITTERS** - **3 DELETE** and enter the code of department that you want to delete and press **[ОПЛ ↵]**.

To delete the data of all emitters, press **[► МЕНЮ]** key to go to **MAIN MENU**, then go to **4 PROGRAMMING** - **4 PROGRAMMING** - **4 DELETE ALL** - **1 YES**.
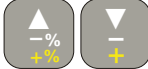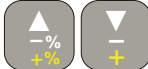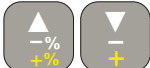
Programming the contracts

Before programming contracts, you can review existing contracts. To do this:

1. Using **[► МЕНЮ]** go to **MAIN MENU**, then go to **4 PROGRAMMING** - **9** - **2 VIEW**. You can view the contracts information on display or print it.

2. If you want to view the information on the display, you need to select **1 DISPLAY** and press **[ОПЛ ↵]**. In this case, the display will show information in rows, to view the next row press **[▼ +]**. To quit review mode, press **[⏻ C]** or **[ОПЛ ↵]**.

3. If you want to view the information printed, you need to select **2 PRINTER** and press **[ОПЛ ↵]**. In this case, a receipt is printed with all information on programmed contracts.

To edit the information on contracts, follow these steps:

1. Using **[► МЕНЮ]** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **9** - **1 PROGRAM**.

2. Enter the number of contract, you want to change and press **[ОПЛ ↵]**.

3. If necessary, select item **1 CONTRACT** and enter the number you want to save data on the contract.

4. Select **2 TITLE XX...** and enter the name of the product group (the maximum allowed 28 characters) and press **ОПЛ ↵** .

5. Select item **3 PAYMENT FORM**, where you can select the form of payment for the current contract. Select the row with the desired form of payment with **▲ −% +%** **▼ − +** keys, then press **ОПЛ ↵** . If everything is done correctly, the asterisk should appear within round barckets. Select the last item of the menu **9 CONFIRMATION**.

6. Select **4 EMITTER CODE**, then select the emitter to correspond to the current contract. Select the row with the desired emitter with **▲ −% +%** **▼ − +** keys, then press **ОПЛ ↵** .

a. If you want this contract to be unlimited (no restrictions upon sales of fuel or goods under this contract), then select **5 [ ] NO LIMIT** and press **ОПЛ ↵** . If the contract becomes unlimited, the "+" appears in square brackets (**5 [+] NO LIMIT**).

7. If the contract is limited by the amount of money, select item **6 [ ] MONEY** and press **ОПЛ ↵** key. If the contract becomes limited by amount of money, the "+" appears in square brackets (**6 [+] MONEY**).

8. Select item **7 BARCODE**, then select the product to be sold under this contract. Select the row with the desired product with **▲ −% +%** **▼ − +** keys, then press **ОПЛ ↵** .

9. Select item **8 LIMIT** (if item **5 [+] NO LIMIT** is active, then this item is not active), and indicate the maximum volume of fuel to be provided under this contract or the maximum amount of money. To do this, press **ОПЛ ↵** (you can erase existing data with **◄ АН**) and enter the amount, then press **ОПЛ ↵** again.

10. Select item **9 PRICE** (if item **6 [+] MONEY** is active, then this item is not active), and indicate the price for the product. To do this, press **ОПЛ ↵** (you can erase existing data with **◄ АН**) and enter the price, then press **ОПЛ ↵** again.

11. To save your input select **10 CONFIRMATION** of this menu. Otherwise your input will not be stored.

You can also delete the contract data.

To remove the data of specific contract, press **► МЕНЮ** to go to **MAIN MENU**, then go to **4 PROGRAMMING** - **9** - **3 DELETE** and enter the number of contract that you want to delete and press **ОПЛ ↵** .

To delete the data of all contracts, press **МЕНЮ** ▶ key to go to **MAIN MENU**, then go to **4 PROGRAMMING** - **9** - **4 DELETE ALL** - **1 YES** .

PAYMENT BY CONTRACT

To accept payment for order under the contract, it is necessary to enter the order details and press **ФС**, then select **9** and **ОПЛ** ⏎, enter the contract number and **ОПЛ** ⏎.

Programming the speed dial keys

For operations that are often repeated and require a large set of shortcuts, you can assign a speed dial key. It allows to reduce the time expenses for use of "uncomfortable" commands. Before programming new speed dial keys into the Panel, you can review existing keys. To do this:

1. Using **МЕНЮ** ▶ key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **10 SPEED DIAL KEYS VIEW** - **2 VIEW** . You can view the speed dial keys information on the display or print it.

2. If you want to view the information on the display, you need to select **1 DISPLAY** and press **ОПЛ** ⏎. The information is shown on operator display as rows. To view the next row press **▼ − +**. To quit review mode, press **С** ⏻ or **ОПЛ** ⏎.

3. If you want to view the information printed, you need to select **2 PRINTER** and press **ОПЛ** ⏎. In this case, a receipt is printed with all information on programmed speed dial keys.

To program speed dial keys, do the following:

1. Using **МЕНЮ** ▶ key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **10 SPEED DIAL KEYS VIEW** - **1 PROGRAM** .

2. Press unassigned key, or **НФ** + digit key, you want to use as the speed dial key.

3. Enter the combination to execute.

4. Press the key or combination (НФ +key), you are programming again.

To delete the data of all speed dial keys, press ▶ МЕНЮ key to go to **MAIN MENU**, then go to **4 PROGRAMMING** – **10 SPEED DIAL KEYS VIEW** – **3 DELETE ALL** – **1 YES** .

Fiscalisation and arrangement of the header of the receipt.

To change these settings, the user must have appropriate rights.

It is necessary to execute Z-report before you change settings.

Operation of the Panel fiscalisation can be done by authorized person only. To do this, select **MAIN MENU** – **5 SERVICE** – **3 FISCALISATION** , to

1. Arrange the receipt header:
   ● Select item **1 OWNER DETAILS** ;
   ● Select item **1 ROW 1 XXX...** , and enter the data that will be displayed in the first row of the receipt. This can be any acceptable character set of not more than 28 characters;
   ● Repeat this operation for items 2 through 4. All the rows will be printed symmetrically in the middle of receipt tape;
   ● Select item **5 CONFIRMATION** to store your input. Otherwise your input will not be stored.
2. Select item **2 TAX ID** , then select item **1 TN** or **2 ID** dependant on the type of tax identity. Then select item 3 and enter the tax ID of 12 characters. Select item **4 CONFIRMATION** to store your input. Otherwise your input will not be stored.
3. Select item **3 FISCAL ID** and enter your fiscal ID, that contain 10 characters.
4. Select item **4 CONFIRMATION** to end fiscalisation procedure. The receipt with the new header and fiscalisation data is printed automatically.

Setting the date and time

To change these settings, the user must have appropriate rights.

It is necessary to execute Z-report before you change settings.

Time or date cannot be earlier than time of last Z-report execution.

To set the time or date follow the steps below:

1. Using **▶ МЕНЮ** key go to **MAIN MENU**, then go to **5 SERVICE** - **5 SETTINGS** - **1 DATE AND**.

2. Select item **1 DATE** or **2 TIME**, depending on what data you need to edit.

3. Please select item 1 and enter current time or date. Date format is DD.MM.YY, where DD is day, MM – month, YY – year. Time format is HH.MM.SS, where HH is hour, MM – minute, SS – second.

4. After the input the **2 SET** item becomes available. Press **ОПЛ ↵** key to save your input or **⏻ C** to cancel.

Programming, adding and removing of users (cashiers).

To change these settings, the user must have appropriate rights.

It is necessary to execute Z-report before you change settings.

To edit the user settings, press **▶ МЕНЮ** key to go to **MAIN MENU**, then go to **5 SERVICE** - **5 SETTINGS** - **3 USERS**.

Add new user.

To add the new user in the **USERS** menu select item **1 ADD**, where you can enter the following data:

1. After selection of **1 NAME ######** item and pressing **ОПЛ ↵** key, you can enter the user's name. 24 chars max.

2. In the menu item **2 RIGTHS** you can select the functions, that will be accessible for current user.

To make the function accessible highlight it and press **ОПЛ ↵** key. If the selected menu item has a "+" sign in square brackets, it means that the function is selected and will be available for the user.

To make function unavailable for the user, highlight it and press **ОПЛ ↵** key. If the selected menu item does not have a "+" sign in square brackets, it means that the function will not be available for the user.

To save your input select **CONFIRMATION** of this menu. Otherwise your input will not be stored.

3. To set the password for user, select item **3** and press **ОПЛ ↵** key, then enter new password for current user.

To save the data entered, you need to select item **4 CONFIRMATION** of sub-menu **ADD**. Otherwise your input will not be stored.

User data edit

To edit the data you need to select item **2 EDIT** in the menu **USERS**. Then select the user name you need to edit and press **ОПЛ ↵** key. The data edit is done in the same way as in "Add new user" item.

User data deletion

To edit the data you need to select item **3 DELETE** in the menu **USERS**. Then select the user name you need to delete and press **ОПЛ ↵** key. If the "+" sign in square brackets is present next to user name, this means that this user's data will be erased.

To delete the selected user's data select item **8 CONFIRMATION** of this menu. Otherwise your data will not be erased.

Network settings

To connect the Panel to the local network select automatic connection mode (the Panel will receive network settings automatically from the DHCP server) or manually enter IP-address, network mask and gateway address for the Internet access. To do this:

1. Using **МЕНЮ ▶** key go to **MAIN MENU**, then go to **5 SERVICE** - **5 SETTINGS** - **5 NETWORK**.

2. To obtain network settings automatically from the DHCP server you need to select item **1 [   ] AUTO** and press **ОПЛ ↵** key, the "+" will appear in the square brackets to show that automatic settings are enabled. To turn automatic mode off, you need to select it and press **ОПЛ ↵** key again – "+" in square brackets will disappear.

3. If you need to enter the network settings manually, you have to disable automatic mode, then select item **2 ADDRESS** and press **ОПЛ ↵** key and enter the IP-address. Then select item **3 MASK XXX.XXX.XXX.XXX** end enter network mask. Select item **3 GATE XXX.XXX.XXX.XXX** after that and enter gateway address.

4. To save your input select **5 CONFIRMATION** of this menu. Otherwise your input will not be stored.

Additional modules

Besides the main functions of the Panel, there are additional modules available. Modules list is constantly updated. Their positions in the menu may also be changed. The main additional modules:

CARDS ONLINE – allows to connect the Panel to the on-line credit card processing system. In the module settings the processing server address and form of payment should be entered. If the module is enabled, then on order checkout by the selected form of payment, the Panel will display the dialog of credit card number input (the card number can also be read by the card reader, supported by the Panel). Upon successful checkout the receipt will be printed, otherwise the Panel will display error.

SHOPPING CART PAYMENT – provides payment confirmation dialog, and on cash payment can display the amount of change. In the menu can be selected the confirmation request upon the checkout, confirmation and cancellation, and the amount of change to be returned to the customer.

CASH SERVER CLIENT – allows uploading of receipts and receipt of data from server. The connection settings and schedule can be set up in the module menu.

DISCOUNTS BY EMITTER – allows to set up the discounts for every emitter by the form of payment.

STORAGE TANK LEVEL MONITORING – enables the fuel level monitoring in storage tanks. You can set up:

- maximum amount of fuel in the storage tank. On attempt to excess the above amount, the Panel will show the message that operation can not be executed.
- The minimum level of fuel in storage tank. On attempt to dispense the fuel if its level in the storage tank is equal or less that amount above, the Panel will show error that there is not enough fuel in storage tank.
- The volume of full tank. On attempt to dispense the fuel up to full tank if its level in the storage tank is equal or less that amount above, the Panel will show error that there is not enough fuel in storage tank.
- ATG level. If this parameter is active, the fuel volume in the storage tank will be considered on the ATG probe readings, not on the sales calculations.

PRODUCT DISCOUNT – upon enabling this module the recalculation of discount will be done: the amount of money remains the same, but the quantity of product increases. For example, by default, if customer wants to dispense fuel for USD10 and has the discount of 20%, the Panel will consider to dispense for USD8 and return USD2 for change. When module is enabled, upon USD10 payment, the fuel will be dispensed for USD12.

COUPONS ONLINE – allows to service coupons, stored on server.

VK-MODULE TCP/IP READER – allows to connect RFID-readers for EM-marine cards.

Programming the fuel station parameters

To change these settings, the user must have appropriate rights.

It is necessary to execute Z-report before you change settings.

The Panel has 4 channels of RS-485 interface, so 4 types/brands of dispensers, using different communication protocols, can be connected simultaneously. Up to 16 fueling points can be connected to every channel. But in total on all channels only 16 fueling points can be connected simultaneously (as the dispenser can have one or two fueling points, so the number of physically connected dispensers does not correspond to the number of fueling points and can also be up to 16).

The number of storage tanks and the number of fuel types can be up to 16 respectively.

Every fueling point can have up to 6 nozzles.

To set up the Panel at the petrol station, the following steps are required:

1. Set up the PTS controller for the connection to selected dispensers.
2. To set parameters of fuel types as the products and bind them with appropriate tax rates.
3. To set parameters of storage tanks and bind fuel types with appropriate tanks.
4. To set parameters of fueling points and bind their nozzles with appropriate storage tanks.

PTS Controller settings

Before you start to set up the PTS controller, collect the data of dispensers to be connected, namely:

1. Dispenser model (connection protocol and baud rate).

2. Physical address of every fueling point of every dispenser. There must not be fueling points with same addresses on a single channel.

To set up controller:

1. Using **МЕНЮ** key go to **MAIN MENU**, then go to **5 SERVICE** - **5 SETTINGS** - **2 CONTROLLERS** - **2 DISPENSER**.
2. Select the channel with physically connected dispenser.
3. Set the protocol and baud rate.
4. To save your settings please select item **3 CONFIRMATION**, otherwise you settings will not be saved.
5. If necessary, repeat steps 2 – 5 for other channels.
6. Please select the fueling point to set up.
7. Select item **1 CHANNEL** and select the channel, the fueling point is connected to.
8. Select item **2 ADDRESS #** and enter physical address of fueling point.
9. If necessary, select item **3 PARAMETERS** and set any special parameters for this particular fueling point (dependent on the connection protocol and dispenser type, parameters are set individually).
10. To save your settings please select item **4 CONFIRMATION**, otherwise you settings will not be saved.
11. If necessary, repeat steps 6 – 10 for other fueling points.
12. If necessary, you can also set the Special parameters of PTS Controller in item **22 PARAMETERS**.
13. To save your settings please select item **23 CONFIRMATION**, otherwise you settings will not be saved.
14. To save your settings please select item **4 CONFIRMATION**, otherwise you settings will not be saved.

Programming of fuel types as the products

To set up controller:

1. Using **► МЕНЮ** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **3** - **1 PROGRAM** and enter the code of product you want to assign to the fuel type.

2. Select item **1 CODE #** and enter the product code you need to assign to the fuel type.

3. Select item **2 PRODUCT GROUP** and enter the product group code you need to assign to the fuel type.

4. Select item **3** and enter the department number you need to assign to the fuel type.

5. Select item **4 NAME** and enter the name of product.

6. Select item **5 TAX GROUP 1** and select the enclosed tax (e.g. excise). To store your input select **7 CONFIRMATION**.

7. Select item **6 TAX GROUP 2** then select the tax group to assign the current fuel type (e.g. VAT 20%). To store your input select **7 CONFIRMATION**.

8. Select item **7 ATTRIBUTES** where set:

   - **POINT POSITION ##** – this parameter determines the order of decimal places to which the issue will be rounded. Standard setting is 2.
   - **DNC** – must not be set on fuel programming.
   - **TNK** – this parameter set that to determine the amount of product, the value provided by ATG system will be used (**this parameter must be selected!**).
   - **PAC** – must not be selected when programming fuel product.
   - To store your input select **5 CONFIRMATION**.

9. Select item **8** and enter the product price.

10. Item **9 QUANTITY** should not be programmed, because when function **TNK** is enabled, the Panel ignores this parameter.

11. To save product parameters, select item **10 CONFIRMATION**, otherwise your input will not be stored.

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Programming the storage tank parameters and assigning the fuel types.

To program storage tanks, follow the steps:

1. Using **►МЕНЮ** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - **5 STORAGE** - **1 PROGRAM** and enter the storage tank number, you need to program.
2. Select item **1 CODE #** and enter the code of storage tank to store into the Panel.
3. Select item **2 BARCODE** and enter the code of programmed fuel type (item 2 in programming fuel type as a product manual).
4. If necessary, select item **3 NAME** and enter storage tank name. By default the name is TANK #_, where #_ – the number of storage tank.
5. Select item **4** to enter the text that will be displayed as the fuel type in current storage tank.
6. Select item **5 MEASURES** and enter the text that will be printed on receipt as the measure for fuel volume (e.g. "l").
7. Select item **6 SIZE** and enter the storage tank size in litres.
8. Select item **7 ACT** and enter actual size of storage tank.
9. Select item **8 REMAIN** and enter the actual volume of remaining fuel in the tank.
10. To save storage tank parameters, select item **9 CONFIRMATION**, otherwise your input will not be stored.

Programming the parameters for fueling points and connecting them to storage tanks.

To program fueling point, follow the steps:

1. Using **►МЕНЮ** key go to **MAIN MENU**, then go to **4 PROGRAMMING** - "6 FUELING POINTS" - **1 PROGRAM** and enter the fueling point number, you need to program.
2. Select item **1 CODE #** and enter the code of fueling point to store into the Panel.
3. Select item **2 NAME** and enter the name of fueling point. By default the name is FP #_, where #_ – the number of fueling point.
4. Select item **3** and then select storage tank, the current nozzle will be connected to.
5. Other nozzles connect in the same way.

To save fueling point parameters, select item **9 CONFIRMATION**, otherwise your input will not be stored.

III. Product operations on the Panel.

The procedure of sales and accounting of fuel

There are several modes to perform the same operation provided by the Panel.

The modes of fuel sales are:

"Full tank" mode.

This mode is used when the order is not for the certain volume of fuel, with the payment for the order after the actual dispensing of fuel.

For this mode of fuel sale operation is necessary:

(Mode 1)

1. Press "CART", enter the fueling point number and press "FP" key.

2. Select the fuel type and press ОПЛ key.

3. The display shows the order with the fueling point number and the type of fuel, then press ПУСК.
4. If the nozzle with current fuel type assigned is up, the dispensing starts immediately.
5. After dispensing is finished, it is necessary that nozzle should be placed down on its place. It will show the Panel, that dispensing is finished.

6. Press ФС or КРТ and select the form of payment for the current order.

   If the customer pays in cash, enter the actual amount of money and press ОПЛ key.

(Mode 2)

1. Press ПРК to display FP mode.

2. Using ▲−% ▼+ select the FP and press ОПЛ key.

3. Select the type of fuel and press the ОПЛ key again. Now there is an aterisk by the number of FP, this shows, that there is an active order at the current FP.

4. Press **ПУСК** and if the nozzle for the ordered type of fuel will be taken up, then dispensing will start immediately.

5. After dispensing is finished, it is necessary that nozzle should be placed down on its place. It will show the Panel, that dispensing is finished.

6. Press **ФС** or **КРТ** and select the form of payment for the current order.

   If the customer pays in cash, enter the actual amount of money and press **ОПЛ ←** key.

Automatic mode (Start/Stop).
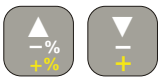
This mode is dedicated for dispensing the fuel in automatic mode, and the Panel traces every transaction.

To set up this mode proceed as follows:

1. Press the **► МЕНЮ** key and enter menu **REGISTRATION**.

2. Using **▲ −% +%** **▼ +** select the item **12 SELF-SERVICE** and press **ОПЛ ←** key.

3. In the recently opened menu **SELF-SERVICE** select item **1 FUELING POINTS** and press **ОПЛ ←** key.

4. Select the FP, you need to switch into automatic mode and press **ОПЛ ←** key. If the "+" sign appears by the FP selected, the automatic mode is successfully enabled. To turn automatic mode off, press the **ОПЛ ←** key when FP selected was in the automatic mode. If the "+" sign disappears by the FP selected, the automatic mode is successfully disabled.

5. To store your modifications, select item **CONFIRMATION** and press the **ОПЛ ←** key.

6. If necessary, in the **SELF-SERVICE** menu select item **2 PAUSE** and enter the minimal latency between orders in seconds and press the **ОПЛ ←** key (delete previous data – **◄ АН** key).

7. If necessary, select item **3 SHOPPING CART**, pressing the **ОПЛ ←** key enables/disables automatic payment for the order. When automatic payment mode is enabled, the **4 FORM OF** item becomes available, where you can select the form of payment in automatic mode. If the automatic payment is disabled, every order need to be completed manually, i. e. for every order you will need to manually select form of payment.

8. If necessary, select item **5 DISCOUNT [%]**, where you can erase the previous value with the **◄ АН** key and specify the percentage of discount for automated fuel sales mode.

9. In the **SELF-SERVICE** menu select item **6 CONFIRMATION** and press the **ОПЛ ↵** key to save your settings.

After you set up automatic mode, in the SHOPPING CART and FP modes, instead of default view of FP-s, the "A" character flashes, that means this particular FP is in automatic mode.

To switch automatic mode off, please see the item 4.

"On money amount" mode

This mode is used when you need to dispense fuel for the preset amount of money.

To do this:

(Mode 1)

1. In the SHOPPING CART mode press the **СУМА** key, and the Panel issues query for the money amount. Please enter the figure accordingly. Press the **ОПЛ ↵** key.

   You can also enter the amount of money first, then press **СУМА** key (do NOT press **ОПЛ ↵** key).

2. Enter the FP number to place the order and press **ПРК**.

3. Select the type of fuel to dispense and press **ОПЛ ↵**.

4. The order is shown on display.

5. Then press **ФС** or **КРТ** and select the form of payment according to the order, or enter the figure of money amount, that customer actually pays, and press **ОПЛ ↵**. The receipt is printed according to the order. In case the order is not completed, the spending receipt is printed.

6. To start dispensing press **ПУСК**. The dispensing starts only in case that the appropriate nozzle is up.

7. After dispensing is finished, it is necessary that nozzle should be placed down on its place. It will show the Panel, that dispensing is finished.

8. Press **ФС** or **КРТ** and select the form of payment for the current order.

   If the customer pays in cash, enter the actual amount of money and press **ОПЛ ↵** key. In case the order is not completed, the spending receipt is printed.

(Mode 2)

1. Press the FP key, display shows FP mode.

2. Press the **СУМА** key, the Panel issues the query. Please enter the figure accordingly. Press the **ОПЛ ←** key.

   You can also enter the amount of money first, then press **СУМА** key (do NOT press **ОПЛ ←** key).

3. Using **▲ −% +%** **▼ − +** select the FP and press **ОПЛ ←** key.

4. Select the type of fuel and press the **ОПЛ ←** key again. Now there is an aterisk by the number of FP, this shows, that there is an active order at the current FP.

5. Press **ПУСК** and if the nozzle for the ordered type of fuel will be taken up, then dispensing will start immediately.

6. After dispensing is finished, it is necessary that nozzle should be placed down on its place. It will show the Panel, that dispensing is finished.

7. Press **ФС** or **КРТ** and select the form of payment for the current order.

   If the customer pays in cash, enter the actual amount of money and press **ОПЛ ←** key.

"For the fuel volume" mode

This mode is used when you need to dispense the certain volume of fuel.

To do this:

(Mode 1)

1. In the SHOPPING CART mode press the **X ЦІНА** key, and the Panel displays the query for the value.

   Please enter the figure accordingly. Press **ОПЛ ←**.

   You can also enter the volume of fuel first, then press **X ЦІНА** key (do NOT press **ОПЛ ←** key).

2. Enter the FP number to place the order and press . "FP" key.

3. Select the type of fuel to dispense and press **ОПЛ ←**.

4. The order is shown on display.

5. Then press **ФС** or **КРТ** and select the form of payment according to the order, or enter the figure of money amount, that customer actually pays, and press **ОПЛ ←**. The receipt is printed according to the order. In case the order is not completed, the spending receipt is printed.

6. To start dispensing press **ПУСК**. The dispensing starts only in case that the appropriate nozzle is up.

7. After dispensing is finished, it is necessary that nozzle should be placed down on its place. It will show the Panel, that dispensing is finished.

8. Press **ФС** or **КРТ** and select the form of payment for the current order.

   If the customer pays in cash, enter the actual amount of money and press **ОПЛ ←** key. In case the order is not completed, the spending receipt is printed.

(Mode 2)

1. Press the FP key, display shows FP mode.

2. Press the **Х ЦІНА** key, the Panel issues the query. Please enter the figure accordingly. Press **ОПЛ ←**. You can also enter the volume of fuel first, then press **Х ЦІНА** key (do NOT press **ОПЛ ←** key).

3. Using **▲ −% +%** **▼ +** select the FP and press **ОПЛ ←** key.

4. Select the type of fuel and press the **ОПЛ ←** key again. Now there is an aterisk by the number of FP, this shows, that there is an active order at the current FP.

5. Press **ПУСК** and if the nozzle for the ordered type of fuel will be taken up, then dispensing will start immediately.

6. After dispensing is finished, it is necessary that nozzle should be placed down on its place. It will show the Panel, that dispensing is finished.

7. Press **ФС** or **КРТ** and select the form of payment for the current order.

   If the customer pays in cash, enter the actual amount of money and press **ОПЛ ←** key.

Additional functions for fuel dispensing.

You can cancel the order only before you start dispensing by pressing the **◄ АН** key.

For the emergency termination of dispensing, it is necessary in the SHOPPING CART mode press the figure – number of FP, then **СТОП**, OR firts press the **СТОП**, then using **▲ −% +%** **▼ +** select the number of FP

and press [ОПЛ ←]. In the FP mode you can also press the figure – number of FP, then [СТОП], or select with

[▲ −% +%] [▼ +] the appropriate FP and press [СТОП].

To give a discount, you need to enter the value and press [▲ −% +%] or [▼ +] depending on the type of discount (% or the fixed amount) before you close the order.

For the sales by special price, you need to press [НФ] [X ЦІНА], set the price for the product unit (for liter), then press [ОПЛ ←] before you proceed with the order. Or you can initially set the price, then press [НФ] [X ЦІНА]. Then proceed with the order by the manual.

To set a mark-up, you need to enter the value and press [НФ] then [▲ −% +%] or [НФ] then [▼ +], depending on the type of operation (% or the fixed amount) before you close the order.

You can also sell the other products in the same receipt with the fuel. To do this, before the order is closed, add to the appropriate SHOPPING CART (corresponding to the customer's FP) the products using [КТ ШК] or by barcode scanner.

Service money deposit/withdrawal

To do the service money withdrawal it is necessary in SHOPPING CART or FP mode to press [▼ +], then the query for the value of withdrawal is displayed. Enter the value and press [ОПЛ ←]. The receipt for the operation is printed and cash drawer is open.

To do the service money deposit, it is necessary in SHOPPING CART or FP mode to press [НФ] then [▼ +], then the query for the value of deposit is displayed. Enter the value and press the [ОПЛ ←] key. The receipt for the operation is printed and cash drawer is open.

Product discount/mark-up

You can set up the discount/mark-up for the one product or for the total amount in the receipt in percentage or fixed value.

To set up the discount in percentage for the certain product, after you enter the order in SHOPPING CART mode press [▲ −% +%], and the Panel displays the query for the discount value.

To set up the mark-up in percentage for the certain product, after you enter the order in SHOPPING CART mode press [НФ] [▲ −% +%], and the Panel displays the query for the mark-up value.

To set up the fixed value discount for the certain product, after you enter the order in SHOPPING CART mode press [▼ − +], and the Panel displays the query for the discount value.

To set up the fixed value mark-up for the certain product, after you enter the order in SHOPPING CART mode press [НФ] [▼ − +], and the Panel displays the query for the mark-up value.

Special price sales procedure

If necessary, you can sell the product with preliminary setting of the price. To do this

1. In the SHOPPING CART mode press the [НФ] then [Х ЦІНА] keys, and the Panel displays the query for the money amount. Enter the price value for the product unit. Press [ОПЛ ←] key.

2. You can also enter the price value first, then press [НФ] and [Х ЦІНА] key (do NOT press [ОПЛ ←] key).

3. Proceed with the product sale as usual.

Sales of related products

Besides the fuel sales, with the Panel you can also sell the related products. For the order you can set:

- the quantity of product units;
- the amount of money to sell the products for;

To sell the product by unit quantity:

1. In the SHOPPING CART mode press the [Х ЦІНА] key, and the Panel displays the query for the value. Enter the value for quantity of product. Press the [ОПЛ ←] key.

2. You can also enter the volume of fuel first, then press [Х ЦІНА] key (do NOT press [ОПЛ ←] key).

3. Enter the code or the bar-code of the product you need to sell and press **КТ ШК** (or **НФ**, and then **КТ ШК** if it is the bar-code). You can also press **КТ ШК** at first, then using **▲ −% +%** **▼ − +** select the name of product to sell and press **ОПЛ ←**.

To enter the amount of money for the product sale:

1. In the SHOPPING CART mode press the **СУМА** key, and the Panel displays the query for the value. Enter the value of money to sell the product. Press **ОПЛ ←**.

2. You can also enter the volume of fuel first, then press **СУМА** key (do NOT press **ОПЛ ←** key).

3. Press **ФС** or **КРТ** and select the form of payment for the current order.

4. If the customer pays in cash, enter the actual amount of money and press **ОПЛ ←** key. In case the order is not completed, the spending receipt is printed.

APPENDIX 1 – Errors, that can be displayed.

000 Unknown error
001 Hardware error
002 Software error
003 System error
004 Interface error
005 RAM Error
006 ROM Error
007 FLASH ROM Error
008 Fiscal Memory Error
009 Electronic journal error
010 Printer Error
011 Printer is out of paper
012 Printer busy
013 Power failure
020 Time error
021 Customer display error
100 Numerical overflow
101 Division by zero
102 Wrong password
103 Access denied
104 No cashier programmed
105 Product not found
106 No department programmed
107 The value is out of range
108 Row length exceeded
109 No serial number
110 Non-fiscal mode
111 Storage tank not found
112 Dispenser not found
113 Nozzle not found
114 Data not initialized
115 Wrong parameter
116 Wrong settings
117 Task is performed
118 Task terminated
119 Function not found
120 Product group not programmed
121 Wrong package link
122 Quantity is higher than remainder
123 Position not found in shopping cart
124 Number of operations in shopping cart
        exceeded
125 Dispensing in progress
126 Number of payments exceeded
127 "Transaction count out of range"
128 Wrong discount/mark-up
129 Tax group not programmed
130 Wrong form of payment
131 Wrong format string
132 Wrong operation
133 Wrong value format
134 Controller error
135 CTRL: Number of drivers exceeded
136 CTRL: Number of FP exceeded
137 CTRL: Wrong driver number
138 CTRL: Wrong FP number
139 CTRL: Driver not found
140 CTRL: Open port error
141 CTRL: Driver error
142 CTRL: Wrong command
143 CTRL: System error
144 Multi-form payment error
145 FP busy
146 Shopping cart is blocked
147 Withdrawal value exceeds the amount in
        cash drawer
148 Emitter not programmed
149 Fiscal memory data damaged
150 Company data not programmed
151 The number of fiscal memory reset exceeded
152 Wrong regular order
153 The row does not correspond with stencil
154 Wrong return operation
155 Resource string not found
156 The date is earlier than the date of the fiscal
        record
157 The attempt to change the article attribute
158 Shift duration exceeded
159 Operation unavailable before the Z-report
160 Fiscal memory full
161 Electronic journal full
162 Printer power failure
163 Printer driver error
164 Printer failed to initialize

165 Printer cover open
166 Printer overheat
167 No connection to dispenser
168 Unable to delete the article
169 Unable to delete the storage tank
170 Contract not found
171 Contract limit exceeded
172 Product does not correspond with contract
173 Wrong excise operation
200 Data open error
201 Data write error
202 Data read error
203 Memory allocation error
204 Failed to open the COM-port
205 Failed to create mutex
206 Failed to create flow
207 Memory allocation error
300 Wrong descriptor
301 Wrong answer
302 Buffer too small
303 STX timeout
304 Packet header timeout
305 Packet data timeout
306 Checksum receipt timeout
307 Wrong packet checksum
308 ETX timeout
309 Wrong packet size
310 NAK received
311 Packet header error
312 Wrong packet ID
313 Connection error
700 Credit card terminal error
800 Wrong key
801 Wrong menu
802 No order on the shopping cart
803 Price change is forbidden
804 Bar-code unknown
805 Not enough fuel in the storage tank
806 Fuel level exceeded
807 ATG data error
809 Operation denied by settings

APPENDIX 2 – Errors printed on receipt

=0, // OK

= 100, // Fiscal module not personalised
= 101, // SAM-module not personalised
= 102, // NT_SAM limit reached
= 103, // SD-card data format error
= 104, // SD-card hardware error
= 105, // 72-hour limit exceeded
= 106, // Memory allocation error
= 107, // SAM-module error
= 108, // Realtime watch module error
= 109, // Unable to connect to server
= 110, // Data packet transfer timeout
= 111, // Data packet receipt timeout
= 112, // An invalid response from the server detected
= 113, // Invalid date/time string received from user
= 114, // Invalid date/time string received from server
= 115, // XML library error detected
= 116, // SAM-module not responding
= 117, // Hardware error of the encryption module in the
              microcontroller
= 118, // Error checksum comparison
= 119, // Error in the parameters of the called function
= 120, // EXC_LENGTH: Wrong telegram length
= 121, // EXC_SEQUENCE: Received telegram is not from transaction
              package
= 122, // EXC_UNKNOWN: Telegram number unknown
= 123, // EXC_VERSION: Telegram version is not supported
= 124, // EXC_RRO_ID: Device not listed
= 125, // EXC_SAM_ID: SAM not listed
= 126, // EXC_NT_SAM: NT_SAM is not bigger than previous
= 127, // EXC_MAC: MAC error
= 128, // EXC_WTX: Extend timeout
= 129, // EXC_BREAK: Server initiated connection close

APPENDIX 3 – Additional functions available in the registered mode

Function numbers available on combination: <Function number> пс .
Function numbers correspond to indexes of main menu items and its sub-menus, e.g. in order to

make X-report you should dial the combination 3 1 пс – that corresponds to menu items:

- 3 REPORTS
  1 X-REPORT

Functions not present in the main menu are shown in the table

901 Switch off the binding of shopping cart to FP
902 Switch on the binding of shopping cart to FP
903 Switch off the automatic closing of fueling order
904 Switch on the automatic closing of fueling order
905 Switch off the automatic opening of cash drawer after the cash payment
906 Switch on the automatic opening of cash drawer after the cash payment
907 Switch on the pre-payment ban
908 Switch off the pre-payment ban
909 Switch on the full tank mode ban
910 Switch off the full tank mode ban
911 Rounding down mode
912 Mathematical rounding mode
913 Rounding up mode
914 Switch on the sale of fuel as product ban
915 Switch off the sale of fuel as product ban
916 Switch on the discount ban
917 Switch off the discount ban
918 Switch on the mark-up ban
919 Switch off the mark-up ban
920 Free price change mode
921 Price change only for zero-price items mode
922 No price change mode
923 Switch on the post-payment ban
924 Switch off the post-payment ban