

System PM 100

Short Manual

Version 1.01

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Subject to technical modification

DESIGNA

SOLUTIONS FOR PARKING



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1 Log-in and Log-out

General :

In order to ensure that only authorised persons work with the system, every user is expected to log in on the system at the start of work, and log out again at the end of work. Depending on the user, certain possibly safety-relevant menu points are deactivated. If the window terminal (PWT) is not being used, after logging out only the log-in mask appears on the screen.

| | | |
|------------|---|-------------------|
| Login | | Date [01.04.1999] |
| Name [|] | |
| Password [|] | |

Procedure for logging in:

- 1.) The user's name is entered in the field **Name**. Capitals and small letters must coincide with the name in the personnel file (main menu point **master data**, sub-menu point **managing personnel**).
- 2.) You will then be asked to enter your personal password. Capitals and small letters must also be correct for the password.
- 3.) After logging in successfully, the menu line for this user appears.

Procedure for logging out:

- 1.) In the main menu **Utilities**, select the submenu point **log out**.
- 2.) After selecting the menu point, the log-in mask appears. You have now logged out and the system waits for the next user to log in.

Troubleshooting:

Problem: After entering the name, the following message appears: "User not present"..

Check the spelling of the name. Where applicable, change "ä" to "ae", "ü" to "ue", "ö" to "oe" and "ß" to "ss". Pay special attention to capitals and small letters in your name.

Problem: After entering the name, the cursor jumps back to the name again.

Check the spelling of the name. Where applicable, change "ä" to "ae", "ü" to "ue", "ö" to "oe" and "ß" to "ss". Pay special attention to capitals and small letters in your name.

The password is entered concealed so that you cannot see whether the capitals lock function on the keyboard has been activated. Check whether the SHIFT key (⇧) or SHIFT-LOCK key (⇩) has been pressed (see ⇩ LED on the keyboard). Also check that the NUM-LOCK key (NUM ⇩) has been activated (see NUM ⇩ LED on the keyboard).

Problem: After entering the password, the system asks you to enter a new password.

Users logging in to the system for the first time have to enter a new (own) password. This aims to prevent the system administrator responsible for personnel and password entries from knowing the new user's password.

- 1.) Chose your new password and enter it in the password input field.
- 2.) The input has to be made concealed, so that the password has to be entered a second time in order to check that the password has been entered correctly.
- 3.) If the input was correct, the system asks you to enter your name and password again. This is then the log-in procedure itself.
- 4.) For all future log-in procedures, the name and new password only have to be entered once.

2 Managing customers

General :

Customer administration takes place in the menu point **manage customers** in the main menu **master data**. Here customer data can be displayed, added, changed and deleted. In order to delete a customer, first you must check that all the customers cards have been deleted.

```

                                Manage customers
                                Date [ 3. 3.99]

Customer no. [      ] Customer / car number [      ]
                                First name [      ]
Company no. [      ] No. of customers [      ]
Company name [      ] Birthday [      ]
                                Profession [      ]

Bank connection [      ] City [      ]
Bank acc. no. [      ] Street [      ]
Bank code no. [      ] Phone [      ]

                                last value cheque [      ]
                                last time cheque [      ]

s=search n=next p=previous c=chan a=add d=delete k=cards co=counter e=end

                                Which option do you require?:
  
```

Customer number (Input necessary) Index number of the customer. All customer data are saved under a customer number. The customer number gives the only possible link to the card data. The customer number cannot be changed in retrospect.

Customer name /car number (Input necessary) Name of the customer or company, or car number . The data in this field can be changed in retrospect.

First name Customer's first name

Company no. If the company is an employee of a company or listed under a higher customer, the customer number of the company or higher customer must be entered here. In the case of companies or individual customers, a zero or the own customer number is entered here.

No. of customers No. of employees of this company or higher customer. If an employee of this company is added or deleted, then the number in this field changes automatically. As long as the number in this field is larger than zero (i.e. there are still employees), it is not possible to delete the data record of the company.

Company name Name of the company or higher company. The company name is entered automatically. It is not possible to make any inputs in this field.

Birthday Date of birth of the customer.

Profession Customer's profession.

Bank connection Customer's bank connection.

Bank code no. Code number of the bank.

Bank acc. no. Customer's bank account number.

City Postal code and city where the customer lives.

Street Street where the customer lives.

Phone Customer's phone number.

Last value cheque Number of coded value cheques for this customer. Inputs cannot be made in this field.

Last time cheque Number of coded time cheques for this customer. Inputs cannot be made in this field.

Several inputs for bank accounts and address can be made for each customer.

Procedure for creating a new customer:

- 1.) Chose the option "a" = "add". The system asks you to enter a new customer number. Enter a customer number which has not been awarded yet. If you enter a customer number which has already been awarded, the following message appears: "customer already exists".
- 2.) You will then be asked to enter a customer name. Please note that capitals and small letters are important in later search functions (searching for names).
- 3.) The system then asks you to enter a company number. If this customer is a private person or company, enter the same customer number. Alternatively, you can enter a "0" (zero) or press the RETURN key to automatically adopt the same customer number.
- 4.) The following input for number of customers is always to be confirmed with "0" (zero) or the RETURN key.
- 5.) This is followed by additional possible data referring to the customer with optional inputs.

Procedure for searching for a customer:

It depends here whether the customer number of the customer is known or not.

Case 1: The customer number is not known.

Chose the option "s"=search. You will be asked to enter a customer number. As this is not known, press the RETURN key to jump over this input. Enter the full name of the customer in the input field for customer name. Pay attention to capitals and small letters. It is sufficient to enter just the first few letters of the name. If there are several names corresponding to the search name, jump to the next name with the option "n"=next" or "p"=previous.

Case 2: The customer number is known.

Chose the option "s"=search. You will be asked to enter a customer name. After entering the customer number, the corresponding customer data record will be displayed.

Procedure for deleting a customer:

Prerequisite is that all cards of the customer have already been deleted. You can display all the customer's cards with the option "k"=cards. The cards are deleted in the main menu **master data** under the submenu point **delete cards**. You must also check that there are no more employees (no. of customers=0) for this company. They should have no more cards and be deleted.

- 1.) Chose the option "d"=delete. You will then be asked to enter the customer number of the customer.
- 2.) Once this has happened, the customer's data record will be deleted from the database.

Procedure for changing customer data:

Chose the option "c"=change. Apart from the customer number itself, all other customer data can be changed.

Troubleshooting

Problem: The customer cannot be deleted.

Case 1: The following message appears: "Customer still has cards".

Before a customer can be deleted, first all the customer's cards must be deleted.

Delete all this customer's cards. Enter the option "k"=cards to see a list of all this customer's cards.

Case 2: The following message appears "Company still has customers".

Before a company (customer) can be deleted, first all employees (incl. cards of the employees) of this customer must be deleted. Delete all this customer's employees. The employees are all those customers which feature the customer number of the company in the company number field.

Problem: A customer with customer number 9999/9998 exists, who has not been created.

A card which has been deleted in the data control centre, but is still in circulation, enters itself again under customer number 9999. This means that the parker can still drive into and out of the car park.

This function can be configured in the system (i.e. it can be deactivated). It is however recommended in the event that all card data are deleted by mistake. Set all this customer's cards on the blacklist ⁽¹⁾, to have them withdrawn by the system.

As soon as the cards are marked as **deleted** ⁽²⁾ or are withdrawn at the exit, they can then be deleted in the system. Once all the cards of the customer with customer number 9999/9998 have been deleted, the customer himself can also be deleted.

Problem: How can I found out which cards the customer has?

Press the option "k"=cards to see a list of all the cards of a customer.

(1) Blacklist (B) If a card has been set on the **Blacklist** by the operator or automatically by the system (parking fraud status), the card is either rejected and/or deleted at the entrances and exits. For this purpose, the blacklist check must be activated at the individual terminals. The menu point **terminal status** indicates whether the blacklist check at the terminals is activated or not. If necessary, it must be activated in the main menu **commands**.

(2) Deleted (D) If a card has been on the blacklist and is then used at a terminal, the card is recoded as **deleted**. I.e. the number of the last used terminal is set to zero on the card. The card status of the card is then set to **deleted** in the database. All other terminals will return the card with the message "card deleted. Please withdraw".

3 Managing and deleting cards

General :

| Manage cards | | | |
|--|--------------------|------------------------|------------|
| car-park-no. [] | Card-No. [] | Car park name [] | Date [] |
| | | Card type [] | Debit card |
| Customer-no. [] | Customer name [] | | |
| CountCustomer [] | CountCust.name [] | | |
| Group number [] | Date of issue [] | Price [] | |
| Made by CP-no. [] | Park-Lot-No. [] | Value [] | |
| Valid from [] | To [] | | |
| Last entry [] | At [] | TCC no. [] | |
| Last exit [] | At [] | TCC no. [] | |
| Last payment [] | At [] | TCC no. [] | |
| Protocol [n] | Amount NZ [] | No. excess payment [] | |
| | used-up amount [] | No. of usage [] | |
| used-up time in HHHH.MM [] | | | |
| | TCC used last [] | [] | [] |
| Area for status information | | | |
| s=search p=previous n=next d=delete m=more e=end | | | |
| Which option do you require? | | | |

The management of all customer-relevant cards, such as season parking cards, debit cards and function cards, takes place in the menu point **manage** customers in the main menu **master data**. This display mask shows all the card data. Card data can only be viewed in this display mask. Individual cards can be set on the blacklist or taken from the blacklist. Cards marked as deleted by the system can be reactivated in this mask. If necessary, individual cards can be set to protocol ⁽¹⁾, i.e. all uses of the cards are protocolled.

| | |
|-----------------------|--|
| Car park no. | Car park number ⁽²⁾ for which this card is coded. This input field can also be used as search criterion . |
| Car park name | Name of the car park for which this card is coded. |
| Card no. | Serial number ⁽³⁾ of the card. This input field can also be used as search criterion. |
| Card type | Number key for the type of card. Card types are season parking cards (5), debit cards (4) and function cards (6). This input field can also be used as search criterion. |
| Function | For function cards, the function of the function card is shown here. |
| Customer no. | Customer number of the customer for whom this card is coded. |
| Customer name | Name of the customer for whom this card is coded. |
| Count customer number | For customer-related counting, the name of the count customer is displayed when this name is different from the actual customer name. This is the case for example when the customer is an employee of a company and customer-related counting has been set up for this company. |
| Count customer name | Name of the customer for whom customer-related counting has been set up. |
| Group no. | For season parking cards, the season parker group number for which this card is coded is shown here. |
| Date of issue | Date on which this card was issued. |
| Price DM | Price of the card when issued. |
| Made by CP no. | Personnel number of the person logged in at the time of issuing the card. |
| Park lot no. | Is no longer used. |

⁽¹⁾ Protocol Card movements can be protocolled if required . This collection of information can then be listed and printed under a separate menu point.

⁽²⁾ Car park number All PM 100 cards and tickets are coded with a car park number. The car park number, which is different for every PM 100 system, prevents cards or tickets from other PM 100 systems being used in this card park.

| | |
|-------------------------|--|
| (3) Serial number | Season parking cards, debit and function cards are coded with serial numbers to allow for management of every single card. There are maximum 4095 serial numbers available for season parking cards, debit and function cards for each car park. |
| Value DM | Current value of the debit card. |
| Valid from/to | Period of validity of the card. |
| Last entry at/TCC no. | Date, time and terminal number of the last entry. |
| Last exit/at/TCC no. | Date, time and terminal number of the last exit. |
| Last payment/at/TCC no. | Date, time and terminal number of the last payment at a pay station . |
| Protocol | States whether the card is currently set to protocolling or not. When set to protocolling, all uses at the entrances and exits are protocollod. The data of these protocols can be displayed in the main menu season parking in the menu point display/list season parker protocol . |
| Amount NZ | Total amount of excess payment for debit or season parking cards. Excess payments are required for debit cards , when the remaining value of the debit card is smaller than the parking fee due. Excess payments are required for season parking cards as soon as the season parker group time has been exceeded. |
| Used-up amount | Used-up amount of the debit card. I.e. the total amount which has been booked off the debit card on the basis of the total parking time and on the basis of the valid rate . This amount is not always the amount which would have been incurred during the parked time in hours and minutes, as the system always charges full rate steps (e.g. hours). |
| No. of usage | No. of entries (usage) with this card. |
| Used-up time in HHHH.MM | Used-up time in hours and minutes. I.e. the total time used up until now with this card. |
| TCC used last | Terminal number of the terminal used last. |
| No. excess payment | Number of excess payments at the automatic pay stations on exceeding the season parker group time (for season parking cards) or on exceeding the value (for debit cards). |

Explanation of card status information:

- Parking fraud(P)** If a customer reverses at an entrance or exit after taking his season parking card or debit card from the Multikon , the card status is set to **parking fraud**. At the same time, the card is set on the **blacklist**. The next time that the card is used at a terminal, it is marked as **deleted** and either withdrawn or rejected at the exit, depending on the terminal configuration. This card status can be reset again by entering "f"=free.
- Blacklist(B)** If a car has been set on the **blacklist** by the operator or automatically by the system (parking fraud status), the card is either rejected and/or deleted at the entrances and exits. The blacklist check at the individual terminals has to be activated for this purpose. The menu point **display terminal status** shows whether the blacklist check has been activated at the terminals or not. If necessary, this function has to be activated in the main menu **commands** with the menu point **switch on blacklist**.
- By TCC(T)** Season parking cards, debit or function cards which have been deleted in the menu point **delete cards** but can still be used to drive into and out of the card park, are entered automatically again **by the TCC**. The customer number is not coded on the cards itself so that the customer number 9999, 9998 or 0 is presumed. The function of the automatic input depends on the configuration, i.e. it can be deactivated as required.
- Expired(U)** If the validity period of a season parking card, debit or function card has expired, then the card status is set to **expired** as soon as the card is used.
- Deleted(L)** If a card was on the blacklist and is then used at a terminal, then the card is recoded as **deleted**. I.e. the number of the last used terminal is set to zero on the card. The card status of the card is then set to **deleted** in the database. All other terminals will return this card with the message "card deleted. Please withdraw".
- Renewed(V)** If a card has been renewed at the data control centre without the card itself being recoded, the card status is set to **renewed**. Once the validity period has expired, the card is then recoded at the next use at an entrance or exit, and the card status **renewed** is automatically reset.
- Query(A)** Cards with the status **query** are always queried by the terminals with the data control centre. This query only passes on the car park number, card type and card number to the data control centre, which returns the number, date, time of last used terminal and current card status to the querying terminal. The point of this function is to achieve a more exact calculation of the rates for debit and season parking cards, as the data control centre memorises the last use down to the last minute. On the debit and season parking cards, the time of the last use is only memorised with 15 minute accuracy.

Procedure for setting a card on the blacklist or taking it from the blacklist:

- 1.) In the main menu **master data**, select the submenu point **manage cards**.
In the display mask **manage cards**, enter "s" for search. You are asked to enter the car park number for which this card is coded.
Then you must enter the card number (serial number) of the card.
If you do not know the card number, you can select the menu point **manage customers** in the main menu **master data**. Search for the customer number or name of the customer and select the option "k"=cards.
This shows you all cards of the customer.
After entering the card number, you must state which type of card it is (4= debit card, 5=season parking card, 6=function card). The system then shows the data record found for this card.
- 2.) Once the card is found, the card can be set on the blacklist with the option "*b"=blacklist. As confirmation, the new card status appears in the lower display field.
- 3.) If the card is to be taken from the blacklist, this can be carried out with the option "*b"=blacklist". The card status information **blacklist** is deleted from the lower display field.

Procedure for setting a card to free:

- 1.) In the main menu **master data**, select the submenu point **manage cards**.
In the display mask **manage cards**, enter "s" for search. You are asked to enter the car park number for which this card is coded.
Then you must enter the card number (serial number) of the card.
If you do not know the card number, you can select the menu point **manage customers** in the main menu **master data**. Search for the customer number or the name of the customer and select the option "k"=cards.
This shows you all cards of the customer.
After entering the card number, you must state which type of card it is (4=debit card, 5=season parking card, 6=function card). The system then shows the data record found for this card.
- 2.) Once the card is found, the card can be set to free with the option "*f"=free. This means that the card status information such as **blacklist**, **deleted** and **parking fraud** are reset.

Procedure for setting a card to protocolling:

- 1.) In the main menu **master data**, select the submenu point **manage cards**.
In the display mask **manage cards**, enter "s" for search. You are asked to enter the car park number for which this card is coded.
Then you must enter the card number (serial number) of the card.
If you do not know the card number, you can select the menu point **manage customers** in the main menu **master data**. Search for the customer number or the name of the customer and select the option "k"=cards.
This shows you all cards of the customer.
After entering the card number, you must state which type of card it is (4=debit card, 5=season parking card, 6=function card). The system then shows the data record found for this card.
- 2.) Once the card is found, the card can be set to **protocolling** with the option "*p"=. As confirmation, a "y" appears in the protocol display field.

Procedure for deleting a card:

There are two different cases:

Case 1: When the card is probably still in use.

This means that the customer has not paid or the card has been stolen or lost.

Set the card on the blacklist.

(See: Procedure for setting a card on the **blacklist** or taking a card from the **blacklist**).

If a card is used at a terminal, the terminal marks the card as **deleted**. Depending on the configuration of the exit, the card is either withdrawn here or returned. It is not possible to proceed as in case 2 until the card has been withdrawn and is in front of you.

Case 2 When the card is in front of you and you are sure that it is no longer being used.

This means that the customer has returned the card.

- 1.) In the main menu **master data**, select the submenu point **delete cards**.
In the display mask **delete cards**, enter "s" for search. You are asked to enter the car park number for which this card is coded.
Then you must enter the card number (serial number) of the card.
If you do not know the card number, you can select the menu point **manage customers** in the main menu **master data**. Search for the customer number or the name of the customer and select the option "k" =cards. This shows you all cards of the customer.
After entering the card number, you must state which type of card it is (4=debit card, 5=season parking card, 6=function card). The system then shows the data record found for this card.
- 2.) Once the card is found, the card can be deleted from the database with the option "d".

Troubleshooting:

Problem: Cards which have been deleted can still be used to drive into and out of the car park.

A card which has been deleted in the data control centre, but is still in circulation, enters itself in the system again under customer number 9999. This means that the parker can drive into and out of the car park again. This function can be configured in the system (in other words it can be activated). It is however recommended for the case that all card data are deleted by mistake. If you set the cards on the blacklist, they will be deleted at next use and where applicable withdrawn at the exit.

Problem: Cards which have been set on the blacklist can still be used to drive into and out of the car park.

- 1.) Check whether the blacklist check is switched on for all terminals (terminal status). If this is not the case, it should be switched on for every terminal in the main menu point **commands**.
- 2.) Check whether all terminals are **online** (terminal status). The terminals must be **online** in order to receive the latest information about the cards set on the blacklist.
- 3.) Under certain circumstances, your system may have been configured (set-up) so that blacklisted cards can be used once more to drive into and out of the car park. Depending on the configuration of the entrances, blacklisted cards are deleted and rejected or deleted and allowed into the car park (to avoid congestion). The configuration of the exits decides whether blacklisted cards are withdrawn and the barrier opened (to avoid congestion), or the card deleted and returned. Please contact a service engineer to change the configuration if necessary.

Problem: Cards which have been taken from the blacklist cannot be used to drive into and out of the car park.

- 1.) Check whether all terminals are **online** (terminal status). The terminals must be **online** in order to receive the latest information about the cards set on the blacklist.
- 2.) Blacklisted cards which have been used in the meantime are marked as **deleted**. This is displayed in the display mask as card status **deleted**. Cards marked as **deleted** must be reset with the option ****f**=free. This option also resets the **parking fraud** status.

Problem: How do I delete the deleted status?

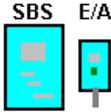
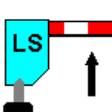
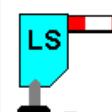
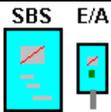
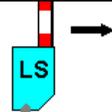
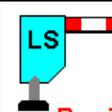
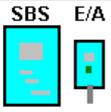
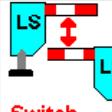
Blacklisted cards which have been used in the meantime are marked as **deleted**. This is displayed in the display mask as card status **deleted**. Cards marked as **deleted** must be reset with the option ****f**=free. This option also resets the **parking fraud** status. The card can then be used again.

Problem: How do I delete the parking fraud status?

If a parker reverses his car at the entrance or exit after the card has been used, his card is marked as **parking fraud** in the system. Cards with this **parking fraud** status are automatically blacklisted. If these blacklisted cards are used at the terminals in the meantime, they are marked as **deleted**. This is displayed in the display mask as card status **deleted**. Cards marked as **deleted** must be reset with the option ****f**=free. This option also resets the **parking fraud** and **blacklist** status.

4 Main menu point "commands"

The main menu point **commands** gives access to all connected terminals. After selection of the individual menu points, you have to select the terminal which is to carry out this command. Depending on the command, a list is shown of all terminals or all terminals with barrier.

| | | | | |
|---|--|---|---|--|
|  TCC in service |  OPEN |  Barrier UNLOCK |  Blacklist Switch ON | Check for IN/OUT-cycle +SP-rate-calc I/O-Check switch ON |
|  TCC OUT of service |  CLOSE |  Barrier LOCK |  Blacklist Switch OFF | Check for IN/OUT-cycle +SP-rate-calc I/O-Check switch OFF |
|  Reset | |  Switch lane | |  Set time |

TCC in service

After selection of this menu point, a list of all terminals is shown. As soon as a terminal is selected, it is set "in service", i.e. it carries out the normal tasks.

TCC out of service

After selection of this menu point, a list of all terminals is shown. As soon as a terminal is selected, it is set "out of service", i.e. it is deactivated.

Barrier open (LS open)

After selection of this menu point, a list of all terminals connected to a barrier is shown. As soon as a terminal is selected, the barrier connected to this terminal is opened. As soon as a vehicle passes the barrier, the barrier is automatically closed again.

Barrier close (LS close)

After selection of this menu point, a list of all terminals connected to a barrier is shown. As soon as a terminal has been selected, the barrier connected to this terminal is closed.

Unlock LS

After selection of this menu point, a list of all terminals connected to a barrier is shown. As soon as a terminal has been selected, the barrier connected to this terminal is unlocked. This means that the barrier reacts to the commands from the terminal.

Lock LS

After selection of this menu point, a list of all terminals connected to a barrier is shown. As soon as a terminal is selected, the terminal connected to this barrier is locked. This means that the barrier no longer reacts to commands from the terminal.

Switch on check for IN/OUT cycle + SP rate calc.

After selection of this menu point, a list of all terminals connected to a barrier is shown. When the check function for in/out cycle is switched on, this prevents repeated driving into and out of the car park. Season parking cards and debit cards are subject to rate calculation at the exit.

Switch off check for IN/OUT cycle + SP rate calc.

After selection of this menu point, a list of all terminals connected to a barrier is shown. When the check function for in/out cycle is switched off, it is possible to drive into and out of the car park repeatedly. Season parking cards and debit cards are no longer subject to rate calculation at the exit.

Switch on blacklist

After selection of this menu point, a list of all terminals connected to a barrier is shown. When the blacklist check function is switched on, it is possible to delete and withdraw cards which have been blacklisted in the data control centre or at the control terminal.

Switch off blacklist

After selection of this menu point, a list of all terminals connected to a barrier is shown. When the blacklist check function is switched off, it is no longer possible to delete and withdraw cards which have been blacklisted in the data control centre or at the control terminal.

Reset

After selection of this menu point, a list of all terminals is shown. As soon as a terminal has been selected, a reset 2 is carried out at this terminal. The reset prompts a "warm start" of the terminal. This is the same as switching the terminal off and on.

Change-over the switch lane function

After selection of this menu point, a list of all switch lane terminals is shown. Switch lanes are entrances and exits on one single lane which operate alternately to handle the traffic coming into and out of the car park.

Set time

This menu point is used to change the time and date of the system (e.g. summer and winter time).

Troubleshooting:

Problem: The terminal does not react to commands such as barrier open/close or reset.

If the terminal only does not react to the commands barrier open or closed, firstly check whether the barrier is switched on or unlocked. If a "*" appears in the "Bar" column of the display mask **show terminal status**, then the barrier is switched on/unlocked. In this case, check whether the on switch (designation 0/1) is switched to 1 (unlocked), or whether the barrier is switched on generally (220 volt supply voltage). If no asterisk appears, then the barrier has to be switched on/unlocked. This is carried out in the main menu point **commands** in the menu point "**unlock barrier/on**".

If the terminal does not react to any commands, first check whether the terminal is online. Terminals which are offline cannot react to commands from the data control centre or the host computer, as communication is interrupted.

- see problem: **How can I bring a terminal back online again?**

Problem: How can I bring a terminal back online again?

First check the terminal itself to see if it is still working. This is the case for example when it still accepts function cards.

If this is the case, please check the following.:

- If all terminals are offline, the data transfer link (DESINET) at the host computer (BFR) or data control centre (DZ) is possibly not OK. All connections (particularly the connection marked VIOS) should be checked that they fit properly.

If this is so, a system stop was possibly carried out beforehand. This system stop stops all communications to the connected terminals.

For safety's sake, a **system stop and new start** should be carried out at the control terminal (PWT) (menu point **system stop and new start** in the main menu **utilities**).

If the **system stop and new start** has not finished after 30 minutes at the latest, press the **End** key on the keyboard.

The host computer should then begin with the new start after a few minutes.

- If several terminals are offline, it is possible for the data link (DESINET) to the first terminal to have been interrupted so that the data link to all following terminals is also interrupted, as all are connected by one data line.
- If only one terminal is offline, check whether the data link (DESINET) to this terminal has been interrupted.

If the terminal no longer functions, please check the following:

- The terminal has possibly been switched off (main switch on the unit or fuse). After switching on again, the terminal should be back online.
- During a reset the terminal goes offline. This condition only lasts a short time and is shown by a number from 1-4 next to the "*" sign in the "on" column.

5 Menu point "Display car park occupancy"

The display mask **display car park occupancy** shows the current car park occupancy. the number of occupied spaces is updated automatically.

```

Car park occupancy                               cityhall
=====

Car park no.   1 free

Total spaces HT (=hourly ticket):                100
Occupied spaces HT ..... :                       99
Total spaces SP (=season parker):                50
Occupied spaces SP1 (reserved) :                 13
Occupied spaces SP2 (not resvd) :                 0
1. Set capacity count for sign ... :             10 set on
2. Set capacity count for sign ... :             20 set on

```

Explanation of the display:

Car park – No. 11 is free:

This shows the number and condition of the car park.

Possible conditions are:

- is free Free hourly ticket spaces are still available. The entrances continue to issue hourly tickets until the car park switches to **occupied**.
- is occupied There are no more free hourly ticket spaces. The entrances issue no more hourly tickets until the car park switches back to **free**.
- is free (manually) The car park has been switched to **free** manually. The entrances continue to issue hourly tickets, even when there are no more spaces.
- is occupied (manually) The car park has been switched to **occupied** manually. The entrances issue no more hourly tickets, even if there are still spaces available.

Total spaces HT (=hourly ticket):

Total number of all available hourly ticket spaces.

Occupied spaces HT:

Total number of all occupied hourly ticket spaces.

Once the total number of all available hourly ticket spaces has been reached, the car park automatically switches to **occupied**.

Total spaces SP (=season parker):

Total number of all available season parker spaces.

Once the total number of all available season parker spaces has been reached, the car park does not switch to **occupied**.

Occupied spaces SP1 (reserved):

Total number of all occupied season parker spaces with reservation.

Season parkers with reservations are always entitled to drive into the car park, regardless of the number of available spaces.

Occupied spaces SP2 (not resvd):

Total number of all occupied season parker spaces without reservation.

Season parkers without reservations are entitled to drive into the car park depending on the number of available hourly ticket spaces. If all hourly ticket spaces are occupied, these season parkers are rejected at the entrances.

1. Set capacity count for sign:

Signs are installed outside the car park at road junctions or on the roadside in order to show the customer which car parks are still free with the display **car park free** or **car park occupied**.

Once the number of occupied hourly ticket spaces reaches the total number of all hourly ticket spaces less the first capacity count, then the connected sign switches from **car park free** to **car park occupied**. Here the first sign switches to occupied when only 10 spaces are available.

2. Set capacity count for sign:

Function as for sign 1 but with other capacity count.

3. Set capacity count for sign:

Function as for sign 1 but with other capacity count.

Possible sign statuses:

- off / free The connected sign shows the status "car park free" and reacts automatically on reaching the capacity count.
- on / occupied The connected sign shows the status "car park occupied" and reacts automatically on leaving the capacity count.
- off / free (manual) The connected sign shows the status "car park free" and no longer reacts on reaching the capacity count.

- on/occupied (manual) The connected sign shows the status "car park occupied" and no longer reacts on leaving the capacity count.

Troubleshooting:

Problem: **The automatic occupancy function no longer reacts. The car park status says free/occupied (manual). At the entrance, hourly tickets can still be drawn or cannot be drawn at all.**

As soon as the car park is switched to **free/occupied (manual)**, the automatic occupancy function (free/occupancy switching depending on current occupancy) is deactivated.
The automatic occupancy function is activated again in the main menu **car park control** or **signs** in the menu point **automatic occupancy function**.

Problem: **The occupancy of the current hourly ticket or season parker spaces does not correspond to the actual occupancy.**

Faulty counts can be caused by locked open barriers.
This can be corrected in the main menu **car park control** or **signs** in the menu point **set car park occupancy**. This should be checked at a time with as little traffic as possible (i.e. at night).

Problem: **The signs no longer switch automatically**

As soon as the car park is switched to **free/occupied (manual)**, the automatic occupancy function of the signs (on/off control depending on current occupancy) is deactivated.
The automatic occupancy function is activated again in the main menu **car park control** or **signs** in the menu point **sign occupied/free, automatic on**.

Problem: **The car park is occupied, although there are fewer hourly ticket parkers in the car park than the total number of available spaces.**

The current occupancy of the hourly ticket spaces is based on both the hourly tickets and the season parkers (without reservation). Season parkers (without reservation) are always counted as hourly ticket parkers and are rejected at the entrance when the car park is occupied.

Problem: **Although the car park is occupied, season parkers can still drive in.**

There is no possibility of blocking the car park for season parkers only. There are no parking space restrictions for the season parkers. They are always entitled to drive into the car park. The number of "total season parker spaces" is only used for a capacity statistic. Care must therefore be taken to ensure that the number of issued season parker tickets coincides with the number of actual season parker spaces.

6 Menu point "Display terminal status"

The display mask **display terminal status** gives an overview of the status of all terminals in the car park.

All terminals are shown which are connected up to this data control centre.

If several data control centres (slaves) are linked together, the corresponding slave must be selected first (menu point **log-in slave**) to display the status of the terminals at the connected slaves.

No changes can be made in this display mask. Troubleshooting actions have to be carried out in other masks.

The status of the terminals is shown on-line, i.e. as soon as anything changes, the display on the screen changes too.

| No | Typ | Onl | On | Bar | Blk | I/O |
|--------|-----|-----|----|-----|-----|-----|
| 01:COD | * | * | | | * | * |
| 03:CAS | * | * | | | * | * |
| 04:EXT | * | * | *_ | | * | * |
| 05:ENT | * | * | *_ | | * | * |
| 11:APS | * | * | | | * | * |
| 20:ETZ | * | * | | | | |

Explanation of the table

No : This column shows the terminal number (TCC).
Every terminal has its own number (address).

The numbers are awarded according to the following rules:

- 1 – The coding unit (can be switched over to manual pay station with number 3) always has number 1.
- 2 – This number is used internally.
- 3 – The first manual pay station (can be switched over to coding unit with number 1) always has number 3. All other manual pay stations also have uneven numbers.
- 4,...,64 – All other even numbers are reserved only for exits and floor counters.
- 5,...,63 – All other uneven numbers are only reserved for the entrances and pay stations

Type: This column shows the terminal type.
The abbreviations are stipulated as follows:

COD –coding unit
CAS –manual pay station
ENT –entrance
EXT –exit
APS –automatic pay station
ETZ –floor counter

Onl: An "*" shows which terminal is **online**, i.e. which terminal can communicate with the data control centre.

On: An "***" shows which terminal is **in service**, i.e. which terminal is working properly. In addition, the following special signs can be shown:

"_ " manual pay station without shift
"+ " manual pay station shift interrupted.
"# " terminal unmanned (special function).
"? " fault at the terminal.
"1-4" reset at the terminal (corresponds to reset 1-4).
RESET 1.3 and 4 are to be carried out by service engineers only

Bar: An "*" shows that the connected barrier is unlocked.
In addition, the following special signs can be shown:

"/ " The barrier is open.
"_ " The barrier is closed.
"1 " The presence loop is occupied.

Blk: An "*" shows whether the blacklist check is switched on.

I/O: An "*" shows whether the inside/outside code is switched on.

Troubleshooting:

Problem: Either the manual pay station is online or the coding unit, but not both at the same time.

The manual pay station and coding unit are one and the same terminal. As this terminal cannot carry out both tasks at the same time (manual pay station tasks and coding unit tasks), it is always only possible for one of the two terminals to be **online**. The other is then **offline**.

Problem: How can I bring a terminal back online again?

First check on the spot whether the terminal is still working. This is the case for example when it still accepts function cards.

If this is the case, please check the following.:

- If all terminals are offline, the data transfer link (DESINET) at the host computer (BFR) or data control centre (DZ) is possibly not OK. All connections (particularly the connection marked VIOS) should be checked that they fit properly.
If this is so, a system stop was possibly carried out before hand. This system stop stops all communications to the connected terminals.
For safety's sake, a **system stop and new start** should be carried out at the control terminal (PWT) (menu point **system stop and new start** in the main menu **utilities**).
If the **system stop and new start** has not finished after 30 minutes at the latest, press the **End** key on the keyboard.
The host computer should then begin with the new start after a few minutes.
- If several terminals are offline, it is possible for the data link (DESINET) to the first terminal to have been interrupted, so that the data link to all following terminals is also interrupted, as all are connected by one data line.
- If only one terminal is offline, check whether the data link (DESINET) to this terminal has been interrupted.

If the terminal no longer functions, please check the following:

- The terminal has possibly been switched off (main switch on the unit or fuse). After switching on again, the terminal should be back online.
- During a reset the terminal goes offline. This conditions only lasts a short time and is shown by a number from 1-4 next to the "*" sign in the "on" column.

Problem: The terminal does not react to commands such as barrier open/close or reset.

If the terminal only does not react to the commands barrier open or closed, firstly check whether the barrier is switched on or unlocked. If a "*" appears in the "Bar" column of the display mask **show terminal status**, then the barrier is switched on/unlocked. In this case, check whether the on switch (designation 0/1) is switched to 1 (unlocked), or whether the barrier is switched on generally (220 volt supply voltage).
If no asterisk appears, then the barrier has to be switched on/unlocked. This is carried out in the main menu point **commands** in the menu point **unlock barrier/on**.

If the terminal does not react to any commands, first check whether the terminal is online. Terminals which are offline cannot react to commands from the data control centre or the host computer, as communication is interrupted.

- see problem: **How can I bring a terminal back online again?**

Problem: There is a question mark next to the "*" sign in the on column.

In some program versions, the question mark is used to display whether there is a fault in this terminal. Check whether a fault message appears in the menu point **Terminal fault status** (or in the list of last fault messages of the terminal). If the fault is confirmed, the question mark is automatically deleted. If this is not the case, please contact the Hotline.

Problem: There is an "#" sign in the on column instead of the "*" sign.

Please contact the Hotline.

7 Coding a season parking card

Prerequisite :

In order to code a season parking card, a season parker group must exist together with a price for this group (main menu point **season parking**, submenu point **manage season parker groups** and **season parking prices 1+2**).

There must also be a customer under the menu point **manage customers** in the main menu **master data** or **season parking**.

Step 1:

- Switch over manual pay station to coding unit.

In order to code cards at the coding unit, first the manual pay station must be switched over to coding unit (does not apply for separate coding unit).

In the main menu **coding** or **season parking** there is the menu point **activate coding unit**. This menu point sends the coding unit **online** and the manual pay station **offline**. The coding unit then reports **in service** and shows that the coding process can start.

Step 2:

- Coding a season parker ticket

A mask is opened with the menu point **code season parking cards** in the main menu **coding** or **season parking**. This mask asks for input of the data required for coding.

| Code season parking cards | | | | | | | |
|---------------------------|-------------------|---------------|----------|-------------------|-------------|---------|-----------------|
| | | | | | | | Date [3. 3.99] |
| DZ-No. [] | | | | | | | |
| Car park number [] | | | | Car park name [] | | | |
| Rate no. [] | valid from [] | | To [] | | | | |
| Customer no. [] | Customer name [] | | | | | | |
| Card number [] | To (card no.) [] | | | | | | |
| | | CC-EC No. [] | | | | | |
| BankCode [] | Acc.No. [] | | | | Seq.No. [] | | |
| Tariff no. [] | Group [] | Number [] | Unit [] | Price [] | out [] | Pmt [] | Val. [] |
| [] | [] | [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] | [] | [] |

Enter DZ-no., use BACKSPACE to quit

After entering the data control centre number and the car park number, the system fills in the rest of the table with the already existing prices for this data control centre and this car park. Depending on the selected rate number, it is possible to make an input in the input field **valid from** or not (val. = valid, valid with immediate effect: yes/no). If it is possible to make an input in this field, then a date in the past or in the future can be entered here. The **to** field can then be calculated. It is not possible to make an input in this field.

After entering the customer number, the corresponding name appears in the field **customer name**. It is not possible to enter the customer name, because the name has been allocated to this customer number beforehand.

In the card number field, the serial number of the season parking card is entered. This card number should not have been already issued. The query for double coding should be answered with no (unless explicitly wanted). When a 0 (zero, alpha numeric block on the keyboard) is entered, the system looks for the next free serial number.

After entering all necessary data, the season parking card can be coded in the coding unit. During the coding procedure, ensure that the magnetic strip of the season parking card is at the bottom.

Step 3:

- Checking the card

After the coding process, the card can be read at the coding unit to check it. For this purpose, the menu point **read card** must be activated in the main menu point **coding** or **season parking**.

Step 4:

- Switching the coding unit back to manual pay station

Once the coding process is finished, the coding unit should be switched back to manual pay station (not necessary for separate coding unit). In the main menu **coding** or **season parking** there is the menu point **activate manual pay station**. This menu point sends the manual pay station **online** and the coding unit **offline**. The manual pay station then reports **in service**.

Troubleshooting:

Problem: After the coding process, the season parking card cannot be read, or the old data have not been overwritten.

All cards and tickets to be coded at the coding unit must be coded with the magnetic strip at the bottom. The coding unit codes only on the lower magnetic track for security reasons. So if an uncoded card is entered with the magnetic strip at the top, the card remains unchanged, i.e. cannot be read. Cards which have already been coded would retain their data on the magnetic strip.

Problem: Newly coded season parking cards cannot be used to drive into or out of the car park.

- 1.) Check whether the cards have been coded with the parameter **outside=yes**. If this is the case, the card must be used for the first time at an entrance.
- 2.) Check whether the cards have been coded with the parameter **paid=no**. If this is the case, the season parking cards must first be paid at a pay station.
- 3.) Check whether the cards have been coded with the parameter **valid=no**. If this is the case, then the start of validity of the season parking card is probably in the future. Code the card again with the current date or with an older date as start of validity of the season parking card.
Delete the old card in the menu point **delete cards**.
- 4.) Check for which season parking group the card has been coded. Is the season parking group entered?
Does the group time allow entrance to the car park?
Change the inputs for the season parking prices or change the inputs for the season parking group.
- 4.) Check for which car park this card has been coded. Does the car park number coincide with the car park number of the entrance or exit?

Problem: Newly entered prices are not to be found in the menu point "coding season parking cards".

- 1.) In the mask **season parking prices 1 + season parking prices 2**, check the inputs for the data control centre and the car park. These data must coincide with the data in the mask **code season parking cards**. Make any necessary changes to the inputs in the mask **season parking prices 1 + season parking prices 2**.
- 2.) In the mask **season parking prices 1 + season parking prices 2**, check the input for the TCC number. All data on the season parking rates to be coded at the coding unit must be entered for TCC number 64 (all TCCs).

8 Coding a debit card

Prerequisite :

To code a debit card, prices must be available (main menu point **prices**, submenu point **debit card prices**). Similarly, a customer must be created or present in the main menu **master data** in the menu point **manage customers** .

Step 1:

- Switch over manual pay station to coding unit.

In order to code cards at the coding unit, first the manual pay station must be switched over to coding unit (does not apply for separate coding unit).

In the main menu **coding** or **season parking** there is the menu point **activate coding unit**. This menu point sends the coding unit **online** and the manual pay station **offline** . The coding unit then reports **in service** and shows that the coding process can start.

Step 2:

- Coding the debit card

A mask is opened with the menu point **code debit cards** in the main menu **coding** . This menu requests input of the data necessary for coding.

| Code debit cards | | | | | Date [3. 3.99] |
|-----------------------|-----------------------|--------------------------|---------------|--------|-----------------|
| DZ-No. [1] | | | | | |
| Car park number [12] | | Car park name [city hall | | |] |
| Rate no. [1] | | | | | |
| | valid from [01.01.99] | | To [31.03.99] | | |
| Customer no. [12] | | Customer name [Miller | | |] |
| Card number [49] | | | | | |
| Tariff no. | months | Value | Price | o.belt | print |
| [1] | [3] | [30.00] | [25.00] | [n] | [n] |
| [2] | [1] | [0.00] | [7.00] | [n] | [n] |
| [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] |
| [] | [] | [] | [] | [] | [] |

Enter DZ-no.

After entering the data control centre number (DZ no.) and the car park number, the system fills the mask with the debit card prices defined for this car park.

The corresponding line of the table is selected in the field rate no.

The point in time for the start of validity can be placed in the past or future as required. The end of the validity period is then calculated automatically. After entering the customer number, the corresponding customer name is filled in the field customer name. In the field card number, a previously not awarded card number can be entered. The question as to double coding should be answered with no (unless explicitly required). When a 0 (zero, alphanumerical block on the keyboard) is entered, the system looks for the next free card number. After entering all necessary data, the debit card can be coded in the coding unit. During the coding process, ensure that the magnetic strip of the debit card is at the bottom.

Step 3:

- Checking the card

After the coding process, the card can be read at the coding unit to check it. For this purpose, the menu point **read card** must be activated in the main menu point **coding** or **season parking**.

Step 4:

- Switching the coding unit back to manual pay station

Once the coding process is finished, the coding unit should be switched back to manual pay station (not necessary for separate coding unit). In the main menu **coding** or **season parking** there is the menu point **activate manual pay station**. This menu point sends the manual pay station **online** and the coding unit **offline** . The manual pay station then reports **in service**.

Troubleshooting:

Problem: After the coding process, the debit card cannot be read, or the old data have not been overwritten.

All cards and tickets to be coded at the coding unit must be coded with the magnetic strip at the bottom. The coding unit codes only on the lower magnetic track for security reasons. So if an uncoded card is entered with the magnetic strip at the top, the card remains unchanged, i.e. cannot be read. Cards which have already been coded would retain their data on the magnetic strip.

Problem: Newly entered prices are not to be found in the menu point "coding debit cards".

1.) In the mask debit card prices, check the inputs for the data control centre and the car park. These data must coincide with the data in the mask **code debit cards**. Make any necessary changes to the inputs in the mask **debit card prices**.

2.) In the mask **debit card price**, check the input for the TCC number.

All data on the season parking rates to be coded at the coding unit must be entered for TCC number 64 (all TCCs).

9 Coding a function card

Prerequisite :

In order to code a function card, a customer (employee) must be created or present in the menu point **manage customers** in the main menu **master data** or **season parking**.

Step 1:

- Switch over manual pay station to coding unit.

In order to code cards at the coding unit, first the manual pay station must be switched over to coding unit (does not apply for separate coding unit).

In the main menu **coding** or **season parking** there is the menu point **activate coding unit**. This menu point sends the coding unit **online** and the manual pay station **offline**. The coding unit then reports **in service** and shows that the coding process can start.

Step 2:

- Coding a function card

```

Code function cards                               Date [20. 5.99]
      DZ-No. [ 0]
Car park number [ 1]   Car park name [           ]
Customer no. [ 0]   Customer name [           ]
Card number [ 0]   MCR-level [ ]
valid until [ ]   Number of one-use-tickets [ ]
Function no. [ ]   Validity in days [ ]
                                   Tube/Hopper No. [ ]

Function no.      Function
[ 1] [F-card: TCC out of service]
[ 2] [F-card: TCC in service]
[ 3] [F-card: Open barrier]
[ 4] [F-card: Close barrier]
[ 5] [F-card: Fill coin tube]
[ 6] [F-card: Empty coin tube]
[ 7] [F-card: Activate change unit]
[ 8] [F-card: De-activate change unit]

Enter DZ-no., use BACKSPACE to quit

```

A mask is opened in the main menu **coding** with the menu point **coding function cards**. This mask requests input of the data required for coding. After entering the data control centre number and the car park number, the system fills the table with the available functions. After entering the customer number, the corresponding name appears in the field **customer name**. It is not possible to enter the customer name as the name has previously been allocated to this customer number. After this, a previously not awarded card number must be entered. When a 0 is entered (zero, alphanumeric block on the keyboard), the system looks for the next free card number. This is followed by the end of validity of the function card and the function number. The available function numbers are listed in the lower part of the input mask. When a "0" (zero) is entered, further functions are listed. The following functions are available:

| | | | |
|--|--|----|--|
| 1 | F-card: TCC out of service | 15 | F-card: Print interim cash report |
| 2 | F-card: TCC in service | 16 | F-card: Print sum report |
| 3 | F-card: Open barrier | 17 | F-card: Print interim sum report |
| 4 | F-card: Close barrier | 18 | F-card: Print interim collect report |
| 5 | F-card: Fill coin tube | 19 | F-card: Print collect sum report |
| 6 | F-card: Empty coin tube | 20 | F-card: Print interim collect sum report |
| 7 | F-card: Activate change unit | 21 | F-card: Print interim time slot stat |
| 8 | F-card: De-activate change unit | 22 | F-card: Print time slot statistic |
| 9 | F-card: Interim cash report | 23 | F-card: Make one-use-ticket |
| 10 | F-card: Repeat cash report | 24 | F-card: Print last error numbers |
| 11 | F-card: Jackpot card | 25 | F-card: Tubes/Hopper set to max |
| 12 | F-card: Coin box pulled out | 26 | F-card: Print receipt-buffer |
| 13 | F-card: Cashier open/close | 27 | F-card: Barrier out of service |
| 14 | F-card: Reset summarized total to null | 28 | F-card: Barrier out of service |
| These cards are not required in normal service | | | |

For further details on the individual functions, please consult the documentation on the function cards.

After entering all necessary data, the function card can be coded in the coding unit. During the coding process, ensure that the magnetic strip of the function card is at the bottom.

Step 3:

- Checking the card

After the coding process, the card can be read at the coding unit to check it. For this purpose, the menu point **read card** must be activated in the main menu point **coding** or **season parking**.

Step 4:

- Switching the coding unit back to manual pay station

Once the coding process is finished, the coding unit should be switched back to manual pay station (not necessary for separate coding unit). In the main menu **coding** or **season parking** there is the menu point **activate manual pay station**. This menu point sends the manual pay station **online** and the coding unit **offline**. The manual pay station then reports **in service**.

Troubleshooting:

Problem: After the coding process, the function card cannot be read, or the old data have not been overwritten.

All cards and tickets to be coded at the coding unit must be coded with the magnetic strip at the bottom. The coding unit codes only on the lower magnetic track for security reasons. So if an uncoded card is entered with the magnetic strip at the top, the card remains unchanged, i.e. cannot be read. Cards which have already been coded would retain their data on the magnetic strip.

Problem: Newly coded function cards are rejected with the message "car park number invalid".

Check for which car park this card has been coded. Does the car park number coincide with the car park number of the entrance or exit?

10 Coding a congress ticket

Prerequisite :

In order to code a congress ticket, prices must be available (main menu point **prices**, submenu point **congress ticket prices**).

Step 1:

- Switch over manual pay station to coding unit.

In order to code cards at the coding unit, first the manual pay station must be switched over to coding unit (does not apply for separate coding unit).

In the main menu **coding** or **season parking** there is the menu point **activate coding unit**. This menu point sends the coding unit **online** and the manual pay station **offline**. The coding unit then reports **in service** and shows that the coding process can start.

Step 2:

- Coding the congress ticket

A mask is opened with the menu point **code congress tickets** in the main menu **coding**. This mask requests input of the data required for coding.

| Code congress tickets | | | | | | | | Date[01.01.99] |
|------------------------|---------|--------------------------|------|----------|------|--------|-------|----------------|
| DZ-No. [1] | | | | | | | | |
| Car park number [12] | | Car park name [city hall | | | | | |] |
| Rate no. [1] | | Price [5.00] | | | | | | |
| No. of tickets [10] | | Number coded [] | | | | | | |
| valid from [01.01.99] | | At [00:00] | | | | | | |
| valid until [31.01.99] | | At [23:59] | | | | | | |
| Tar.no. | # Trips | days | Hrs. | Price | Val. | f.Belt | print | |
| [1] | [0] | [31] | [0] | [15.00] | [y] | [n] | [n] | |
| [2] | [6] | [5] | [0] | [5.00] | [n] | [n] | [n] | |
| [3] | [1] | [1] | [0] | [0.00] | [y] | [n] | [n] | |
| [4] | [3] | [3] | [0] | [3.00] | [n] | [n] | [n] | |
| [] | [] | [] | [] | [] | [] | [] | [] | |
| [] | [] | [] | [] | [] | [] | [] | [] | |
| [] | [] | [] | [] | [] | [] | [] | [] | |
| [] | [] | [] | [] | [] | [] | [] | [] | |

Enter DZ-no., use BACKSPACE to quit

After entering the data control centre number and the car park number, the system fills in the lower table with the already existing prices for this data control centre and this car park.

In the field **no. of tickets** the number of congress tickets to be coded is entered. The field **number coded** shows how many cards have already been coded during the coding process. It is not possible to make inputs in this field.

Depending on the selected rate number, inputs in the input field **valid from** are possible or not (val=valid, immediately valid: yes/no). If input is possible, then a date in the past or in the future can be entered here. The **until** field is then calculated, as the validity duration is stipulated by the rate number. It is not possible to make any inputs in this field. After entering all necessary data, the congress ticket can be coded in the coding unit. During the coding process, ensure that the magnetic strip of the congress ticket is at the bottom.

Step 3:

- Checking the card

After the coding process, the card can be read at the coding unit to check it. For this purpose, the menu point **read card** must be activated in the main menu point **coding** or **season parking**.

Step 4:

- Switching the coding unit back to manual pay station

Once the coding process is finished, the coding unit should be switched back to manual pay station (not necessary for separate coding unit). In the main menu **coding** or **season parking** there is the menu point **activate manual pay station**. This menu point sends the manual pay station **online** and the coding unit **offline**. The manual pay station then reports **in service**.

Troubleshooting:

Problem: After the coding process, the congress ticket cannot be read, or the old data have not been overwritten.

All cards and tickets to be coded at the coding unit must be coded with the magnetic strip at the bottom. The coding unit codes only on the lower magnetic track for security reasons. So if an uncoded card is entered with the magnetic strip at the top, the card remains unchanged, i.e. cannot be read. Cards which have already been coded would retain their data on the magnetic strip.

Problem: After starting the coding process, the coding unit goes out of service and offline.

Check whether the selected rate codes the congress tickets from the belt (**f.Belt =yes**). ensure that either the ticket belt has been inserted in the coding unit, or choose another rate.

11 Setting car park occupancy

General:

In the main menu **car park control** there is the submenu point **set car park occupancy**. Here it is possible to correct the maximum number of parking spaces, the values at which the signs change from **car park free** to **car park occupied**, together with the actual occupancy of the car park. It can be necessary to make corrections for example in the event of failure of entrances or exits so that the parkers leave the car park unregistered. Car park occupancy should preferably be checked during periods when the car park is practically empty, or when there are no season parkers parking in the car park.

```

Set car park occupancy
Date [20. 5.99]

DZ-no. [ 1]
Car park number [ 1]      Car park name [cityhall  ]
Max no. short term parkers[ 100]  New entry [ 100]
Max no. season parkers [ 50]      New entry [ 50]

HT CP Full sign 1 [ 10]      New entry [ 10]
HT CP Full sign 2 [ 20]      New entry [ 20]
HT CP Full sign 3 [ 30]      New entry [ 30]

Current ST parkers [ 88]      New entry [ 88]
Current season parkers [ 13]  New entry [ 13]
SP-2 present [ 0]           New entry [ 0]

s=search  n=next  p=previous  c=change  r=relative  e=end

Which option do you require?

```

| | |
|-----------------------------|---|
| DZ-No. | Number of the data control centre for which these data are valid. |
| Car park number | Number of the car park for which these data are valid. |
| Car park name | Name of the car park for which these data are valid. |
| Max. no. short term parkers | Total number of all available short term parking spaces. |
| Max. no. season parkers | Total number of all available season parking spaces. After reaching the total number of all available season parking spaces, the car park does not switch over to occupied . |
| HT CP full sign 1 | Signs are installed outside the car park at road junctions or at the roadside to tell the customer which car park is still free with the signs car park free or car park occupied . Once the number of occupied short term parking spaces reaches the total number of all short term parking spaces less the first capacity count, the connected sign switches over from car park free to car park occupied . In this case, the first sign switches over to occupied when only 10 spaces are still available. |
| HT CP full sign 2 | Functions as 1. Sign only with another capacity count. |
| HT CP full sign 3 | Function as 1. Sign with another capacity count. |
| Current ST parkers | Total number of all occupied short term parking spaces. Once the total number of all available short term parking spaces has been reached, the car park automatically switches over to occupied . |
| Current season parkers | Total number of all occupied season parking spaces with reservation. Season parkers with reservation are always entitled to drive into the car park, regardless of the number of available parking spaces. |
| SP-2 present | Total number of all occupied season parking spaces without reservation. Season parkers without reservation are entitled to drive into the car park, depending on the number of available short term parking spaces. If all short term parking spaces are occupied, then these season parkers will be rejected at the entrances. The number of season parkers without reservation in the car park also influences the signs (capacity count). |

Procedure for changing the current capacity counter :

- 1.) In the main menu **car park control**, select the submenu point **set car park occupancy**.
- 2.) Use the options "n"=next, "p"=previous or "s"=search to select the required car park.
- 3.) You can now enter the current capacity counter either as absolute (total number) or relative figure.
 - "relative"= With the option "r"=relative, the cursor jumps to the input field **Current ST parkers → New entry**. Here you have the possibility of entering the relative change (positive or negative change) with the corresponding mathematical sign (+ or -). If you make the input without specific sign, the system presumes that this is a positive change. Press the **RETURN** or **enter** key to confirm. The cursor then jumps to the input field **Current season parkers → New entry**. Possible inputs here correspond to the input field **Current ST parkers → New entry**. The same applies to the input field **SP-2 present → New entry**. After confirming the input in the last field, the counters are adopted.
 - "absolute"= With the option "c"=change, the cursor jumps to the input field **Max. no. short term parkers → New entry**. Confirm this field without making an input by pressing the **RETURN** or **enter** key. The cursor jumps to the field **Max. no. season parkers → New entry**. Confirm the fields **Max. no. season parkers → New entry**, **HT CP full sign 1 → New entry**, **HT CP full sign 2 → New entry** and **HT CP full sign 3 → New entry** without making any inputs by pressing the **RETURN** or **enter** key. The cursor then jumps to the input field **current ST parkers → New entry**. Here you can enter the new absolute occupancy of the short-term parking spaces. Confirm the input with the **RETURN** or **enter** key. The cursor then jumps to the input field **Current season parkers → New entry**. Here you can enter the new absolute occupancy of the season parking spaces. Confirm the input with the **RETURN** or **enter** key. The cursor then jumps to the input field **SP-2 present → New entry**. Here you can enter the new absolute occupancy of season parking spaces without reservation. Confirm your input with the **RETURN** or **enter** key. After confirming the input in the last field, the new counters are adopted.
- 4.) Close the mask **set car park occupancy** with the option "e"=end.

Procedure for changing the capacity count (signs) :

- 1.) In the main menu **car park control**, choose the submenu point **set car park occupancy**.
- 2.) Use the options "n"=next, "p"=previous or "s"=search to select the required car park.
- 3.) With the option "c"=change, the cursor jumps to the input field **Max. no. short term parkers → New entry**. Confirm this field without making any inputs by pressing the **RETURN** or **enter** key. The cursor jumps to the field **Max. no. season parkers → New entry**. Confirm the field **Max. no season parkers → New entry** again with the **RETURN** or **enter** key. In the field **HT CP full sign 1 → New entry**, you can enter a new capacity count. Confirm your input with the **RETURN** or **enter** key. You can then change the inputs in the fields **HT CP full sign 2 → New entry** and **HT CP full sign 3 → New entry**. The following input fields are again confirmed with the **RETURN** key.
- 4.) Close the mask **set car park occupancy** with the option "e"=end.

Procedure for changing the total count:

- 1.) In the main menu **car park control**, choose the submenu point **set car park occupancy**.
- 2.) Use the options "n"=next, "p"=previous or "s"=search to select the required car park.
- 3.) With the option "c"=change, the cursor jumps to the input field **Max. no. short term parkers → New entry**. In the field **Max. short term parkers → New entry** you then have the possibility of entering a new number of parking spaces. Confirm your input with the **RETURN** or **enter** key. The cursor jumps to the field **Max. no. season parkers → New entry**. In this field you can then enter a new number of parking spaces for the season parkers. Confirm your input with the **RETURN** or **enter** key. The following input fields are again confirmed with the **RETURN** key.
- 4.) Close the mask **set car park occupancy** with the option "e"=end.

12 Displaying/printing the cash book

General :

The cash book records all sums resulting from example from emptying the pay stations and from the sale of cards and tickets. These data are constantly recorded. Under the menu point **Cash book display/print** in the main menu **Lists (technical)**, you have the possibility of restricting the scope of data to be displayed.

```

Cash book display/print
Date [20. 5.99]

DZ-no. [ 1]
Tcc-number (0=all) [ 0]
Car park number (0=all) [ 1]

Report from date [20/ 5/1999]
Time [00.00]

Report to date [20/ 5/1999]
Time [17.39]
Amounts alternate currency [n]
(T)erminal (P)rinter (F)ile [T]

Input correct (y/n) ? [y]

```

| | |
|------------------------------|---|
| DZ-No. | Number of the data control centre for which the cash book data are to be shown. |
| TCC number (0 = all) | Terminal number for which the cash book data are to be shown. If one terminal is selected, then the cursor misses out the input field which queries the car park number. When a zero (0) is entered, automatically all terminals of the data control centre are selected. |
| Car park number (0 = all) | Car park number for which the cash book data are to be shown. If a terminal has already been explicitly selected, this query for car park number is missed out. |
| Report from date | Starting date for the report from the cash book data |
| Time | Starting time for the report from the cash book data. |
| Report to date | Final date for the report from the cash book data. |
| Time | Final time for the report from the cash book data. |
| Amounts alternative currency | Query as to whether the cash book data should be printed in the second currency (e.g. Euro). |
| (T)erminal (P)rinter (F)ile | Query as to whether the cash book data are to be produced on the terminal (enter T), on a printer (enter P) or in a file (enter F). |
| Input correct (y/n)? | Confirmation that all data for printing the cash book data are correct. For y=yes, the cash book data are then printed. For n=no, the query is repeated. |

Explanation of the cash book printout:

```

-----
DESIGNA VLT                                     Page:      1
-----
Date:  20. 5.99                                Time : 17.41
                                     C a s h  b o o k

Selection:
DZ-No.:      1
Car park:    1      TCC no.:    all
Date:        20. 5.99          0.00
             20. 5.99          17.39

DZ-No.:      1  cityhall
Car park:    1

TCC no.   Date      Time      Booking      Amount      Fu card
  11      15. 5.99  13.07      APS : Coin    500.00  DM      0
  11      20. 5.99  13.08      APS : Coin    200.00  DM      0

=====
Total income:      700.00  DM
Fill tube          0.00   DM
    
```

- TCC-No Terminal number which has triggered the cash book input.
- Date Date on which the cash book input was made at the terminal.
- Time Time at which the cash book input was made at the terminal.
- Booking Column for the booking type.
 The following booking types are possible
 COD: CG Coding a congress ticket
 COD: SP Coding a season parking card
 COD: LT Coding a lost ticket
 COD: VC Coding a value cheque
 COD: TC Coding a time cheque
 DOUP: VT Double coding of a debit card
 DOUP: SP Double coding of a season parking card
 PROL: VT Renewal (topping up) of a debit card
 PROL: SP Renewal of a season parking card
 DOUB: VT Double coding and renewal of a debit card
 DOUB: SP Double coding and renewal of a season parking card
 APS: Coin Pulling the coin cassette
 APS: Note Pulling the note cassette
 APS: fill Filling the coin tubes or coin hoppers (also note return)
 HKC: BOOK Change of shift at the manual pay station
 GCI: invoice Cash cut at the money card module
- Amount Amount (in DM or EURO) of the cash cook input.
- Fu card Number of the function card or personnel number of the person making the cash book input
- Total income Total amount of the cash book entries at the selected terminals for this period.
- Fill tube Amount used to fill the coin tubes or coin hopper (also note return)

13 Shift report

General :

A shift report records all data in the car park for a defined period of time (i.e. from the start to the end of the shift). A shift report can contain the data of one or several car parks optionally. The period for which the shift report is drawn up can be freely selected. On changing shift, this automatically ends the current shift and starts the begin of the new shift. Compiled shift reports can be summarised as required to a summary shift report for a freely selected period of time.

| Shift change | | | Date [01.01.98] |
|--------------------------------|-----------------------------|--------------|-----------------|
| Kind | Name | Status | |
| [1] | [SumShiftreport P1+P2] | [0] | |
| [2] | [ShiftReport P1] | [0] | |
| [3] | [ShiftReport P2] | [0] | |
| [] | [] | [] | |
| [] | [] | [] | |
| [] | [] | [] | |
| Kind [1] | Name [SumShiftreport P1+P2] | | |
| No. [1] | Name [Night shift] | Time [6:00] | |
| No. [2] | Name [Morning shift] | Time [12:00] | |
| No. [3] | Name [Day shift] | Time [18:00] | |
| No. [4] | Name [Evening shift] | Time [24:00] | |
| No. [1] | Name [Night shift] | Time [6:00] | |
| n=new shift m=more e=end | | | |
| Which option do you require? n | | | |

Explanation:

| | |
|--------|--|
| Kind | This column shows the number of the various kinds of shift report. |
| Name | This column shows the names of the various kinds of shift report. |
| Status | This display field currently has no function. |
| No. | Column of the available shift times. |
| Name | Designation of the individual shift times |
| Time | Column for the individual shift times. |

Procedure for changing shift.

- 1.) In the main menu **Lists (clerk)**, select the submenu point **Activate shift change**.
- 2.) Select option "n"=new shift. You will be asked to select one of the defined shift report kinds. The shift report kinds stipulate for which car parks a shift change takes place (closing the old and opening the new shift). After selecting the kind of shift report, the cursor jumps to the input field No. Depending on the time of day, the system will suggest the designation for your current shift. This designation later appears on the shift report. Another designation can be selected if required.
After selecting the shift designation, the shift change takes place automatically.
- 3.) Quit the mask with the option "e"=end.

```

View system report
Date [01.01.98]

Kind of system report [ 1 ]      Name [SumShiftreport      ]
Type [1]                      Name [Night Shift      ]
Shift number [ 12]              Date [01.01.98] [00:00]
                                Date [01.01.98] [05:59]

Printout lines with zero-value? [n]
Long report [n]
Output to printer/terminal [D]

Kind                               Name
[ 1 ]                               [SumShiftreport P1+P2]
[ 2 ]                               [ShiftReport P1      ]
[ 3 ]                               [ShiftReport P2      ]
[   ]                               [                    ]
[   ]                               [                    ]
[   ]                               [                    ]

c=collected report  b=Shift report  i=interim report  m=more  e=end

Which option do you require? b

```

Explanation :

| | |
|---------------------------------|---|
| Kind of shift report | Display field for the kind of shift report selected by the shift report number (no input possible). |
| Name | Name of the kind of shift report selected by the shift report number (no input possible). |
| Type | Display field for the shift report time selected by the shift report number (no input possible). 0=all 1-4=Number of the shift report times |
| Name | Name of the shift times (no input possible). |
| Shift number | If a shift report (b=shift report) is to be shown, the last/latest shift report number is suggested in this input field. An older shift report number can also be entered. |
| Date | Display field for the date and time of the start and end of the shift of the selected shift report (no input possible). |
| Printout lines with zero-value? | This input field stipulates whether lines with zero value (0) are also to be printed. |
| Long report | A long shift report contains all data of all terminals which have been produced between the start and end of the shift. A short shift report summarises the data of all entrances and exits to and from the car park. |
| Amount in alternate currency | Alternatively all sums of money can be printed in a second currency (e.g. Euro). |
| Output to printer/terminal | The shift report can be produced either with "T" on the terminal or with "P" on the printer. |
| Kind | Column for listing the numbers of all kinds of shift report (no input possible). |
| Name | Column for listing the names of all kinds of shift report (no input possible). |

Procedure for listing/printing a shift report :

- 1.) In the main menu **lists (clerk)**, select the submenu point **print/display shift report**.
- 2.) After entering the option "b"=shift report, the cursor jumps to the field **shift number**. The system already enters the shift number of the last concluded shift. It is also possible to enter older shift numbers.
- 3.) You can now delete all lines in the shift report with a zero value (**printout lines with zero-values=y**).
- 4.) If a "y"=yes is entered in the input field **long report**, then a detailed report is produced.
- 5.) You have the possibility of producing all sums of money in Euro in the input field **Amount in alternate currency**.
- 6.) The report can be produced alternatively on a printer or on the terminal.
- 7.) For displaying on the terminal, the enter (**RETURN**) key can be pressed to scroll on a page.
- 8.) The mask is then automatically closed.

14 Managing personnel and password

General :

In order to ensure that only authorised persons work with the system, every user is expected to log in at the start of work and log out again at the end of work. Certain (safety-relevant) menu points can then be deactivated, depending on the user. If the window terminal (PWT) is not being used, after logging out only the log-in mask should appear on the screen. Prerequisite for this is that every user (employee) is entered in the system.

```

Employees
Date [21. 5.99]

Employee no. [      ]      Personnel nam[      ]
                          First name [      ]
Company no. [      ]      No. of customers [      ]
Company name [      ]      Birthday [      ]
                          Profession [      ]

Bank connection [      ]      City [      ]
Bank acc. no. [      ]      Street [      ]
Bank code no. [      ]      Phone [      ]

                          last value cheque [      ]
                          last time cheque [      ]

s=search n=next p=previous c=chan a=add d=delete k=cards co=counter e=end

Which option do you require?

```

Employee no. Employee's index number. All personnel data are stored under an employee number.
(Input necessary) The employee number cannot be changed later on.

Personnel name Name of the employee. The inputs in
(Input necessary) this field can be changed later on.

| | |
|------------------|--|
| First name | Employee's first name. |
| Company no. | Not in use. |
| No. of customers | Not in use. |
| Company name | Not in use. |
| Birthday | Employee's date of birth . |
| Profession | Employee's profession. |
| Bank connection | Employee's bank connection. |
| Bank code | Bank code of the bank . |
| Account number | Employee's account number. |
| City | Postal code and city where the employee lives. |
| Street | Employee's street. |
| Phone | Employee's phone number. |
| Last value check | Not in use. |
| Last time cheque | Not in use. |

Procedure for creating a new employee:

- 1.) In the main menu point **master data**, the submenu point **manage personnel** is opened.
- 2.) Add a new data record with "a"=add. First enter the employee number.
The employee number can be freely chosen between 1 and 5000. If the selected number has already been used, then the input is interrupted with a fault message.
- 3.) Input of the employee's surname is obligatory. All other details are optional.
- 4.) Leave the input mask with "e"=end.
- 5.) The employee must then be given a password.

Procedure for changing personnel data:

- 1.) In the main menu point **master data**, the submenu point **manage personnel** is opened.
- 2.) Press "c"=change for the cursor to jump to the name input field.
If the input is not to be changed, confirm with the **RETURN** key.
- 3.) After making the change, leave the input mask with "e"=end.

```

                                Manage passwords
                                Date [21. 5.99]

                                ENo. [      ]

                                Surname [          ]
                                First name [          ]

                                =====

                                Password [          ]
                                Level [    ]
                                Group [    ]

                                Changing of password complementary [ ]
                                Deleting of password allowed [ ]
                                Changing of groups allowed [ ]
                                Changing of levels allowed [ ]
                                Changing of status allowed [ ]

                                c=change  r=rights  d=delete  n=next  p=previous  s=search  e=end

                                Which option do you require?

```

| | |
|------------------------------------|---|
| ENo. | Selected employee number. |
| Surname | Surname of the selected employee. |
| Password | Password (not shown). When an input is made in this field, only the cursor position is shown. |
| Level | The level indicates which menu points appear on the terminal for this employee. The allowed levels are between 0 and 255. Level 0 has the highest authorisation and level 255 the lowest. |
| Group | The range of values is between 0 and 32. The group stipulates which kind of menu points are displayed for this employee. The following groups are pre-defined: <ul style="list-style-type: none"> 32 = Service 31 = Hotline 28 = Clerk 24 = Car park personnel 20 = Car park technical |
| Changing of password complementary | When a 1 is entered here (1=yes), the employee will be asked to change his own password next time he logs in to the system. The new password will be queried twice to check that there are no input faults. This is recommended to give a new employee the possibility of selecting his own password. The parameter changes automatically to 0 (0=no) after the corresponding employee has logged in. |
| Deleting of password allowed | This stipulates whether the employee is entitled to delete his own password in order to define a new password. (1=yes, recommended :0=no). |
| Changing of groups allowed | This stipulates whether the employee is entitled to change his own group definition. (1=yes, recommended :0=no). |
| Changing of levels allowed | This stipulates whether the employee is entitled to change his own level definition. (1=yes, recommended :0=no). |
| Changing of status allowed | This stipulates whether the employee is entitled to change his own status (all data in this mask). (1=yes, recommended :0=no). |

Procedure for creating a new password:

- 1.) Once the new employee has been entered in the menu point **manage personnel**, the rights have to be defined in the submenu **manage passwords** in the main menu **master data**.
- 2.) Use the option "s"=search to enter the employee number of the new employee in the input field ENo.
- 3.) When the new data record is shown in the mask, the previous password has to be deleted with the option "d"=delete and a new password entered.
Recommendation: This should be a provisional (dummy) password (e.g. company name), as the new employee enters his own password the next time he logs in to the system.
- 4.) The level and group is stipulated with "r"=rights. The status information is then entered in the system.

| | | |
|-----------------|----------------------------|-----------|
| Recommendation: | Password change compulsory | = 1 (yes) |
| | Password deleting allowed | = 0 (no) |
| | Group change allowed | = 0 (no) |
| | Level change allowed | = 0 (no) |
| | Status change allowed | = 0 (no) |
- 5.) Leave the input mask with the option "e"=end.
- 6.) After you have logged out, the new employee can log in.
- 7.) First, the new employee has to enter his own name in the input field name (paying attention to capitals and small letters). This is the same name as entered in the menu point **manage personnel**. You will then be asked by the system to enter your password. This is the provisional (dummy) password. The system then asks you to enter a new password. This input is concealed, i.e. for safety reasons the password cannot be seen on the monitor. In order to avoid typing errors, the password has to be entered again. If the repeated input of the password was correct, the actual log-in procedure can proceed. Confirm the name with the **RETURN** key and enter the new password.

Procedure for changing the rights (level/group):

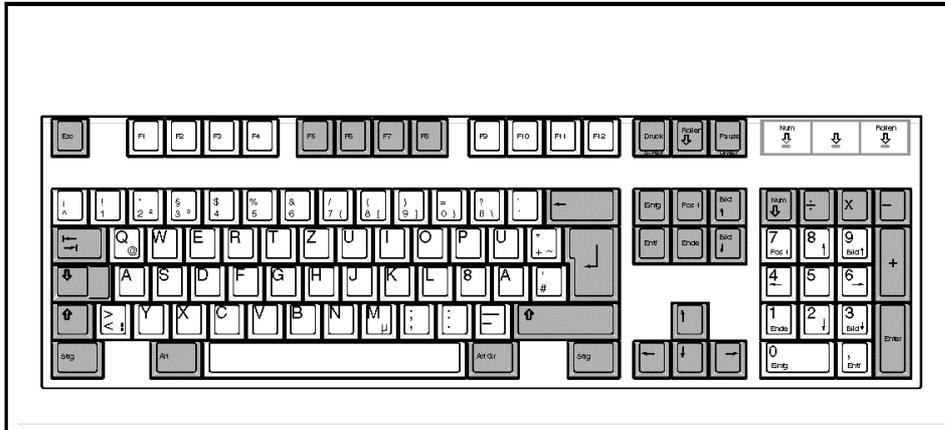
- 1.) Ensure that you are entitled to change your own rights or the rights of the employee concerned (level change allowed = 1 (yes)).
- 2.) In the main menu **master data**, select the menu point **manage passwords**.
- 3.) Select the required data record (employee) with the options "s"=search, "n"=next or "p"=previous.
- 4.) Use the option "r"=rights for the cursor to jump to the level field. After entering a new level or confirming the existing level, the cursor jumps to the group field. After entering a new group or confirming the existing group, you have the chance of changing the status information.
- 5.) Leave the input mask with the option "e"=end. The changes are active after the next logging in procedure for the employee concerned.

Procedure for changing the password:

- 1.) Ensure that you are entitled to change your own rights or the rights of the employee concerned (level change allowed = 1 (yes)).
- 2.) In the main menu **master data**, select the menu point **manage passwords**.
- 3.) Select the required data record (employee) with the options "s"=search, "n"=next or "p"=previous.
- 4.) Use the option "d"=delete for the cursor to jump to the field password. Enter your new password. If this is not your own password, it is recommended to use a temporary password for safety reasons. You then have the chance of setting the status "password change compulsory" to 1 (1=yes) with the option "r"=rights". The employee then has the possibility of entering his own password which is only known to him.
- 5.) Leave the input mask with the option "e"=end. The changes are active after the next logging in procedure for the employee concerned.

15 Keyboard

The "PM 100 Window Terminal" user interface has some key functions which are the same for all menus and masks. These key functions are only mentioned in the chapters when their functions deviate from those described here, or are particularly important.



"Plus" key



The "plus" key of the number block fades the menu line on and off. The last processed menu is accessed. When the "plus" key is pressed without ending the active mask, the system opens a new window in the foreground and allocates it the next higher function key (F1...F9). The system has nine windows. When all nine windows are occupied, it is not possible to activate any more functions. The number of the displayed window is shown in the right hand bottom corner of the screen.

"Minus" key



When the "minus" key is pressed, a frame with the window number is placed around the current window, or the frame is removed again.

"ESC" key



The "ESC" key fades the menu line out again.

Function keys "F1...F9"



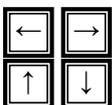
The function keys "F1...F9" bring the corresponding window with the same number into the foreground.

Function key "F10"



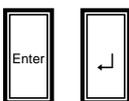
The function key "F10" switches between the active window and the window with a list of the system messages. If there are more system messages than can be shown on the screen, you can scroll upwards with the keys <Ctrl><Screen↑> to show older system messages. Use the keys <Ctrl><Screen↓> to scroll down again.

Cursor keys



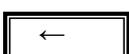
The cursor keys <←>, <→> can be used to change between the main menus in the menu line. Depending on access authorisation, there are more main menus than space on the screen, so that the menu line can be scrolled horizontally when the edge of the screen has been reached. Use the cursor keys <↑>, <↓> to change between the individual submenus in the main menus.

"ENTER" key (RETURN)



The "enter" key is used to call the submenus in the main menus and to confirm the data in the input fields of the masks.

"Backspace" key



The backspace key is used to jump back one input field in the masks. When the backspace key is pressed in the first input field, the system leaves the mask and returns to the main menu.

Number keys



The number keys are used for quick input of numbers. Please check that the "Num" key is switched on (the LED "Num" on the keyboard lights up). If this key is not switched on, then the number keys have other functions.

16 Refilling short term parking tickets or chips

General:

The store of tickets or chips for short term parkers at the entrances is limited. The ticket version has 5000 paper tickets in a storage box. The storage container (hopper) of a chip coin entrance has capacity for approx. 2300 chips.

When this store at the entrances needs to be refilled depends on the number of short term parkers who have driven into the car park. Before the store comes to an end, a fault message is sent to the data control centre. In the ticket version, about 100 tickets are left when this message is produced, or approx. 250 chips in the case of the chip version. Once the store has been exhausted, it is still possible for debit cards, season parking cards and congress tickets to be used to drive into the car park.

Procedure for re-filling the short term parking tickets:

- 1.) Open the door of the entrance terminal and remove the old ticket box. The remaining tickets can be used for producing congress tickets, replacement tickets etc. at the manual pay station. You can also use the tickets at the automatic pay station in order to fill the storage box of lost tickets.
- 2.) Open the new box at the top. A small opening must be visible on the underneath. This opening is intended for the lack-of-tickets sensor (micro switch) in the receptacle for the ticket box.
- 3.) Remove the cardboard straps from around the box. These could prevent automatic conveyance of the ticket belt.
- 4.) Introduce the start of the ticket belt into the rear part of the Multikon. Be sure that the magnetic stripe is faced down. The first two rollers of the Multikon must grasp the first ticket of the ticket belt. Ensure that there are no hindrances in the way of the ticket belt.
- 5.) Press the thread-in ticket (test ticket) button on the lateral control plate of the Multikon. Check the ticket cut and the print of the ticket printer. If necessary, adjust the ticket cutting function respectively ticket printer (see maintenance instructions).
- 6.) Check the degree of contamination in the Multikon. Clean the Multikon as required by blowing out or sucking out the paper remains (see maintenance instructions).
- 7.) Check the contrast in the display at the entrance. Adjust the contrast if required (see maintenance instructions). Check the contrast from the angle at which the car driver will be looking.
- 8.) Check the sensitivity of the presence loop and the closing loop. If necessary, calibrate the two loops (see maintenance instructions).
- 9.) Close the door of the entrance terminal again.
- 10.) Empty the ticket box at the exit point.

Procedure for refilling the short term parker chips:

- 1.) Open the lateral cover of the exit terminal and remove the container for the chips. If necessary, tip the chips in a bucket and replace the chip container.
- 2.) Open the door of the entrance terminal. Pull out the unit on which the read/write unit and the hoppers are mounted.
- 3.) Fill the chips into the funnel over the hopper. ensure that the funnel is not over full, otherwise the unit cannot be pushed back into position.
- 4.) Press the thread-in ticket (test ticket) key on the lateral control plate of the read/write unit. Ensure that the coding procedure works perfectly.
- 5.) Check the degree of contamination of the read/write unit. If necessary, clean the read/write unit by blowing through (see maintenance instructions).
- 6.) Check the contrast in the display at the entrance. Adjust the contrast if required (see maintenance instructions). Check the contrast from the angle at which the car driver will be looking.
- 7.) Check the sensitivity of the presence loop and the closing loop. If necessary, calibrate the two loops (see maintenance instructions).
- 8.) Close the door of the entrance terminal again.

Troubleshooting:

Problem: The ticket cut is ragged. The Multikon is very contaminated.

The Multikon adjusts the speed of the motors automatically. These settings are lost when the entrance is switched off and on again. The Multikon needs about 10 ticket outputs in order to adjust the speed again. These 10 tickets are usually raggedly cut.
If the ticket cut remains ragged permanently, then the light barrier in the transport unit of the Multikon must be adjusted (see maintenance instructions).

Problem: The print can be scarcely read.

First check whether the ribbon needs replacing. If this is not the case, the position of the printer head must be adjusted. It may be positioned too low so that it drags over the ticket. It may also be printed too high so that the pins of the printer head do not reach the ribbon or only just.

Problem: The entrance terminal produces a continuous strip of tickets.

The cause here is usually the light barrier in the transport assembly. This light barrier is either contaminated or defect.

Problem: The Multikon transports the ticket belt only a short way forwards, then moves back again.

The cause here is usually the light barrier in the transport assembly. This light barrier is either contaminated or defect.
Another possibility is that the ticket belt is not being cut properly. There may be cuttings between the tickets.

Problem: There is no display. It is not possible to request a ticket.

The presence loop must be occupied in order to trigger the ticket request key. This prompts the display at the entrance. Check the presence loop. Proceed with a loop calibration if necessary.

Problem: All produced short term parking tickets are parking frauds, although all drove through the entrance.

Check the closing loop of the entrance. If necessary, proceed with a loop calibration. If this is not successful, the entrance must be closed immediately. Call a service engineer

Problem: The Multikon is not working properly. Some tickets are coded, others are not.

Clean the Multikon according to the maintenance instructions.
The cause could also be faulty ticket delivery. Check the quality of the tickets. Compare them with earlier deliveries.

Problem: The chips are jammed in the read/write unit.

Clean the read/write unit according to the maintenance instructions. Check the chips for any signs of damage.

17 Re-filling with change.

General:

The automatic pay stations automatically fill their change stores with every payment. Under certain circumstances, bottlenecks with certain kinds of coins are possible for certain rates or certain payment modes by the customers. In this case, the store of change has to be refilled at the pay station by hand.

Procedure for filling the change store:

- 1.) Introduce the function card **fill tube** in the pay station Multikon.
- 2.) The pay station display shows the amount of coins to be inserted in each channel.
- 3.) Insert the coins in the coin slot. The display changes accordingly. Too many coins and counterfeits are rejected in the return tray.
- 4.) End this procedure by pressing the cancel (©) key. This is followed by a printout by the receipt printer.

Procedure for changing the hoppers:

- 1.) Open the pay station and remove the empty or nearly empty hopper.
- 2.) Replace the empty or nearly empty hoppers by means of a new hopper filled to the maximum level.
- 3.) Close the pay station and insert the function card **set tube/hopper level** for the replaced hopper numbers in the pay station Multikon.

Procedure for filling the change store by hand to the maximum level:

- 1.) Open the pay station and fill the tubes or hoppers to the maximum level.
- 2.) Close the pay station and insert the function card **set tube/hopper level** for the filled hopper or tube numbers in the pay station Multikon.

Procedure for emptying the tubes or hoppers

- 1.) Insert the function card **empty tubes** in the pay station Multikon. The total change store is then emptied into the end cassette. The counter statuses in the tubes or hoppers are updated accordingly.
- 2.) It is possible for the system to make payment mistakes, so that there could be more coins in the tubes or hoppers. In this case, the counter status of the pay station deviates from the actual counter status of the coins. In order to empty these remaining coins in the end cassette, the function card **Jackpot** can be used. The counter statuses are not updated.

Troubleshooting:

Problem: **How can I find out the maximum levels in the tubes or hoppers?**

The maximum levels are configured in the system. Ask your service engineer.

Problem: **The pay station does not pay out any change.**

Check the level of the change store. Fill as required. When there is not enough change, the pay station display shows the message "please pay the right amount."

18 Pulling the end cassette

General:

The coin end cassette is used for the money which could not be used to fill the change store. Maximum levels are defined for all end cassettes (for both coins and notes). Once these maximum levels are reached, a fault message is passed on to the data control centre. Operation of the pay station is not impaired.

Procedure for pulling the coin end cassette (APS Basic)

- 1.) Open the door of the pay station and in the lower part of the pay station, open the door to the end cassette.
- 2.) Lock the end cassette by pushing the key into the end cassette and turning clockwise. On turning the key, the printout of a report is triggered. The end cassette can now be pulled out of the pay station by grasping the handle.
- 3.) The end cassette is locked when it is pulled out of the pay station. It can only be opened or emptied by means of a second key on the back. After emptying the end cassette, it is closed again and the key removed from the back.
- 4.) If there is a second end cassette, it can now be pushed into position.
- 5.) To unlock the end cassette again, the key has to be turned anti-clockwise. This opens the end cassette again.
- 6.) Pull the handle to check that the end cassette is opened and unlocked. It must stay in the automatic pay station.
- 7.) Close the door to the pay station.

Procedure for pulling the coin end cassette (APS COMPACT)

- 1.) Open the door of the pay station and in the lower part of the pay station, open the door to the end cassette.
- 2.) Pull the end cassette out of the automatic pay station. On pulling the end cassette out, the printout of a report is triggered.
- 3.) The end cassette is locked when it is removed. It can only be opened or emptied by means of a second key. After emptying the end cassette, it is closed again and the key removed. After removing from the automatic pay station, the cassette cannot be pushed back in before being emptied and locked again.
- 4.) Close the door to the end cassette.
- 5.) Close the door to the pay station.

Troubleshooting:

Problem: **The pay station remains out of service after removing the end cassette.**

Check that the end cassette has been unlocked in the automatic pay station. Close the door to the end cassette and the door to the automatic pay station.

Problem: **The end cassette cannot be pushed back into the automatic pay station.**

After removing the compact cassette, the end cassette cannot be pushed back into the pay station again. First the cassette has to be opened and locked again before it can be pushed back again. For the Basic pay station, check the position of the key.

19 Re-filling with receipt paper

General :

The receipt printers at the manual pay stations and automatic pay stations use thermal paper. Only the specified paper should be used. When the receipt paper is coming to an end, two red stripes appear at the sides of the paper. The printer head and the cutting device can get very hot.

Procedure for inserting the paper roll in the receipt printer of the manual pay station:

- 1.) Open the cover of the printer.
- 2.) Pull the lever on the side next to the cutting device, to lift the printer head.
Caution: you do not need to open the cutting device to change the roll of paper.
- 3.) If necessary, remove the old roll of paper.
- 4.) Cut the paper of the new roll off at right angles.
- 5.) Check that the paper roll is unwinding in the right direction (see instructions on the inside of the cover).
- 6.) Press the paper roll holder to one side and insert the roll. Check that the roll is positioned properly in the guide.
- 7.) Insert the paper strip in the paper intake, turn the knob until a strip of paper approx. 5 cm long peeps out of the cutting device.
- 8.) Check that the paper is positioned properly!
- 9.) Reset the lateral lever!
- 10.) Remove the protruding paper by tearing it off at the edge of the cutting device.
- 11.) Close the cover of the housing.

Self-test for the receipt printer:

The receipt printer has a self-test facility. There is a switch on the back of the unit. Switch the receipt printer off. Then press the "LF" key. Hold this key down and at the same time switch the unit on. As soon as the printer has started printing, you can release the "LF" key. The unit then proceeds with a print test which also tests the function of the cutting device (partial cut and full cut).

Procedure for inserting the paper roll in the receipt printer of the automatic pay station:

- 1.) Open the door of the automatic pay station.
- 2.) If necessary, remove the old paper roll and insert the new roll of receipt paper in the printer.
- 3.) Cut the paper in the new paper roll off at right angles.
- 4.) Check that the paper is unwinding in the right direction
- 5.) Push the new receipt paper in the paper guide. Press the button for paper feed. Ensure that the roll is positioned properly in the guide.
- 6.) Close the door to the automatic pay station.

Troubleshooting:

Problem: The printer does a paper feed but does not print

Check whether the paper has been inserted the right way round. The thermal paper used in these machines can only be printed on one side. Where necessary, remove the paper and insert it again.

Problem: The paper is not drawn into the printer

Check the paper guide for paper remains. Where necessary, remove the paper remains from the paper guide of the printer.

The new paper should not have any bent corners. Cut the new paper off at right angles with scissors.

Problem: The paper has jammed in the printer

Check the paper guide for paper remains. Where necessary, remove the paper remains from the paper guide of the printer.

Check that the paper is fed in correctly

Problem: The printer won't print (manual pay station).

Check whether the red "error" LED lights up. It shows various faults:

1.) The printer head is possibly not engaged. Open the cover and press the smaller of the two levers downwards to engage the printer head.

2.) The printer head is overheated. Wait until the temperature decreases again. The printer does an automatic reset once the temperature has fallen again.

3.) The cutting device is blocked. Remove the paper from the cutting device and press the "LF" key.

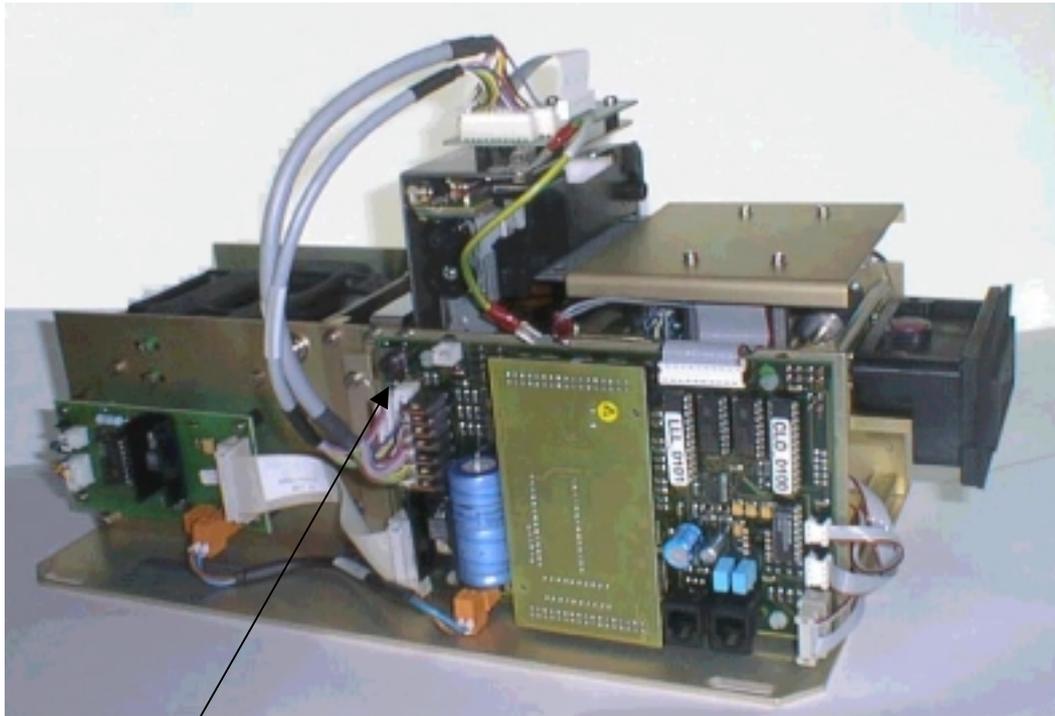
20 Maintenance

General:

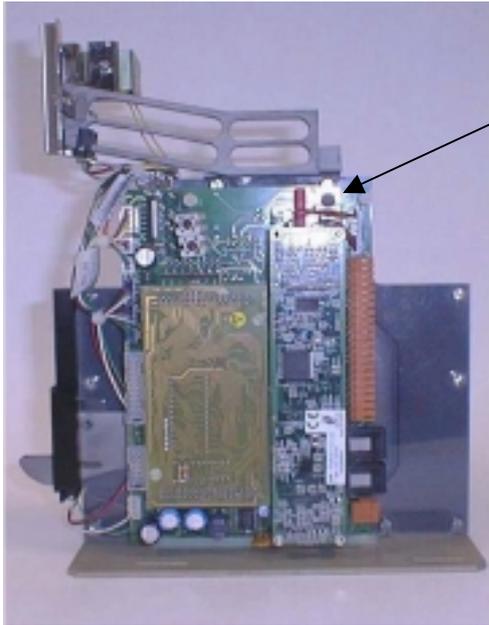
Continuous operation of the system and also environmental influences leave their traces on the machines. Certain care and maintenance work should therefore be carried out so that these influences do not cause failure to or damage of the machinery. The frequency with which such care and maintenance work is required depends on the number of tickets issued. The degree of contamination from car exhaust fumes depends on where the terminals are positioned. Experience shows that high dust levels must be expected in car parks of a closed design or underground car parks.

The individual maintenance tasks should be carried out depending on the degree of contamination, but at least once per month.

Maintenance of a Multikon:



- 1.) Press the button on the Multikon. A test ticket (thread-in ticket) will be produced. Check the print on the ticket. If the print is too weak, then the ribbon box must be replaced. When inserting a new ribbon box, ensure that it is routed over the web next to the printer head. Check the changes by means of a new test ticket.
- 2.) Check the ticket cut. The cut should be exactly between two tickets on the connection piece. If necessary, the light barrier of the transport assembly in the rear of the Multikon must be adjusted. Switch the terminal off for safety's sake. Slightly unscrew the two screws of the light barrier and push the light barrier forwards or backwards. Tighten the screws again, switch the terminal on again and print about 10 test tickets. The motor control of the Multikon requires about 10 tickets after being switched on and off to adjust the speed of the motors back to the optimum level. The first few tickets are usually poorly cut. Check the last tickets to see if the ticket cut is on the connection piece.
- 3.) Oil the transport spindle in the ticket printer with resin-free Ballistol oil.
- 4.) Check that the magnetic card reader is clean. Paper dust and paper bits should be blown away with compressed air or (preferably) sucked out. Ensure that no paper remains are blown into the ticket guides.
- 5.) Clean all transport rollers of the magnetic card reader with isopropyl alcohol and a lint-free cloth.
- 6.) The read/write heads of the Multikon can be cleaned with a cleaning ticket which is inserted two or three times into the Multikon. The ticket can be used several times by moistening with isopropyl alcohol.
- 7.) The blade and the eccentric device in the transport assembly are oiled with resin-free Ballistol oil.
- 8.) Paper remains on the blade of the transport group are removed with a small screwdriver.
- 9.) Check that the Multikon is correctly positioned in the terminal. The ticket intake should protrude far as far as possible out of the front plate so that the tickets cannot be inserted under or over the ticket intake.
- 10.) Empty the ticket container of the exit terminal. Check whether there are any inserted debit or season parker cards in the ticket container.

Maintenance of a read/write unit:

- 1.) Check the read/write unit for cleanness. Dust is to be blown out carefully with compressed air.
- 2.) Check that the read/write unit is properly positioned in the terminal. The front of the read/write unit should be in line with the front plate.
- 3.) At the entrance terminal, press the button "test chip" and check proper functioning, including the chip paths.
- 4.) Check the automatic changeover of the chip output in the entrance terminal. Press the button "test chip" again and hold the produced chip in the feed channel. The hopper control should switch over automatically to the next hopper and produce another chip.
- 5.) Remove the "rejected" chips from the container in the entrance terminal; check their functions by coding and reading them repeatedly at the coding unit.
- 6.) Switch the terminal off and check that the slot cover moves easily. Oil the closing mechanism if necessary.
- 5.) Check proper functioning including the chip paths in the exit terminal.
- 6.) Clean the chip container of the exit terminal to remove any foreign substances.

Maintenance of the coin validator:

- 1.) Open the pay station door and the door to the change unit.
- 2.) Open the coin validator and clean the coin path with isopropyl alcohol and a lint-free cloth.
- 3.) Close the door to the change unit again, and the door to the pay station.

General:

- 1.) For outside temperatures under 10°C, check the heating thermostat of the heating in the terminal to ensure that it functions properly.
- 2.) Check that the barrier arm at the entrances and exits is properly fastened. If necessary, it must be attached properly in its support.
- 3.) Check and where necessary replace the receipt paper rolls in the pay stations.

20.1.1