Important

This is a specification only, K.I.S. has the right to change the specification during the development process without notice.

We welcome any suggestion about the features and functions for our next generation of the operating system.

Please e-mail your request for enhancements and/or changes to frank.boonen@kisbv.com



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Revision-list

K.I.S Operating system

11011-1131	<u> </u>	
Date	Paragraph	Remark
06/06/1999		Release version 0.0
09/06/1999	1 Data base structure	Increased number of records for foreign currency to 32
		Increased number of records for PB# from 1.000 to 5.000
	6.5 Plu-link	Procedure written was incorrect.
	6.6 Plu –link quantity	Paragraph changed.
09/06/1999	19 Keyboard	This paragraph has been added, all paragraph numbers from
		this point are changed.
09/06/1999	2 Initialising terminal	Changed position of lock to S-position
09/06/1999	4 Files	System programming mode is the S-position instead of PGM-
		position combined with a clerk key
09/06/1999	34 Perinherals	Paragraph added discussing the ones supported
02/08/1999	6.7 Plu options	Discount itemizer 1 and 2 selection added
02/00/1999	34 Shift levels	To print a descriptor for active article and price shifts
	32 System parameters	Parameter 2 to activate article and price shift descriptor print
	Screen lay outs	Options, print and display flags
	22 time band	Time banda reduced from 60 to 49
	22 discount	Number of options increased from 8 to 16
	23 discourit	Sereen law out added to manual
05/00/4000	24 condiment	Screen lay-out added to manual.
05/08/1999		Release version 0.2
14/01/2000	All	Features under development are in red, version 0.3
	11 Foreign currency	Select to open a different drawer then the default one for the
		active clerk through the foreign currency function
28/01/2000	34 Peripherals	Cable lay-outs for scanner, PC and printers
20/04/2000	6 Plu options	Connection Epelsa scale
	31 LAN	Explanation implemented LAN. This paragraph has been
	34 Peripherals	added, all paragraph numbers from this point are changed
		Printer cable for ports 1 & 2
	32 System parameters	78 Number of terminals on the LAN
		16 Terminal number on the LAN
11/05/2000	5.12Inventory adjustment	Procedure how to modify inventory counters
	5.13 Plu price change	Procedure how to change the sales price of items
1/09/2000	31 Handheld terminal	Interface to a RF ordering terminal. Contact K.I.S. for
	32.11 Re-routing remote	samples.
	printers.	Procedure for re-routing
	21 Happy hour selection	
	Print options in all	Price level can be set for each time band individually.
	functions	To safe paper it is possible not to print the logo on the receipt,
		for KP-dockets printed via the receipt printer, but is printed
	5.8 Plu options high	when the guest check is printed via the receipt printer.
		Condiment plu's print in red (impact), or in inverse (thermal).
	5.8 Plu options low	If qty is 1 the qty is not printed if condiment price is 0,00 price
	32 System parameters	is not printed.
		Menu PLU (option 5)
		SystemFlag 83 ¹ / ₂ for quantity for price and article shift
15/09/2000	32 System parameters	Parameter 26 use the modifier text string to recall plu's with
		random number as a preset.
	34.29 Preset PLU	Explanation how to program preset plu's with random
		numbers.
	5.15 Look-up and	Explanation how to program a department key on the
	department key	keyboard.
	32 System parameters	If parameter 106 has a value of 8 (Option 4) the system will
		automatically use modifier 1 in combination with either a
		permanent or temporary tax shift for items registered.
	5.11 Tax itemisers	Explanation of the tax shift and the modifier option in
		combination with a tax shift.

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	34.25 & 34.26 tax shift keys	
	Machine number	Enter 42 on the machine test function (system keyboard) to display the hardware number of the terminal. This number is required for the gITs authorisation code.
09/10/2000	33	Modem programming SystemParameter 108 modem programming
25/10/2000	35 Pheripherals	Printer cable lay-out for ports 1 & 2
27/10/2000	21 Time bands	Price shift level.

1 Data base structure.

The operating system offers the following functionality and files:

	Number of Records	Counters	Periods	Caption size
Correction functions	16	Amount, Qty	0-4	16
Foreign currency	Euro, 31 additional	Amount	0-4	16
Discount or Mark up	16	Amount, CC	0-4	16
In Drawer counters	32	Amount	0-4	16
P.O. & R.A.	8	Amount	0-4	16
Tendering functions	32, EFT preset tender	Amount, CC	0 – 4	16
Groups	Max 99	Gross, discount, net Qty, CC	0 – 4	24
Departments	Max 999	Gross, discount, net Qty, CC	0 – 4	24
Plu's Max 4 price levels Inventory, item sold first and last time.	Max 30.000	Gross, discount, net Qty, CC, inventory Qty Inventory Amt	0 – 4	24
Previous Balance Time calculation Food & beverage & miscellaneous itemizers, covers 3 lines text 24 char	Max 5.000		0 – 4	16
Тах	16		0-4	16
Clerk's time keeping per each clerk	Max 999		0-4	16
Sales persons	Max 255		0-4	24
Condiments Positive, negative, price	Max 999			24
Time zone's	48		0-4	04
Modifiers	Max 999		0	24

Note: the fields can be changed using the Constructor.

2 Initialising terminal.

With the control lock in the S-position turn the machine on, while pressing the most right key, bottom row on the keyboard. The display will show Program Init. A default application is generated, with the following programming keyboard:

Test	Dump											
Q	W	E	R	Т	Υ	U	1	0	Р			
А	S	D	F	G	Н	J	K	L				
Z	Х	С	V	В	Ν	Μ	,			Opt	CR	
	Caps		SP	SP	SP	SP			$\uparrow\uparrow$	\uparrow	$\downarrow\downarrow$	
	BS									\downarrow		
									Number	Туре	Clr	
									7	8	9	
									4	5	6	
									1	2	3	
									0	00		Rpt

Test:	this key starts the various hardware tests				
Dump:	this key dumps the file details on the printer connected to the terminal				
Opt:	this key toggles the status of various options.				
Cr:	this key functions like the enter key on a computer keyboard.				
$\downarrow\downarrow$	this key functions as a page down key.				
\downarrow	this key functions as a line down key.				
\uparrow	this key functions as a line up key.				
1 1	this key functions as a page up key.				
Rpt:	this key is the report trigger key.				
Type:	selects the various files				
Number:	the number key to select a certain record number in the file.				
Caps:	caps lock.				
BS:	back space key.				
SP:	space bar				
A page is defined as 12 lines.					

Customising applications.

The parameters for the application can be changed through the keyboard or through a computer. Changing is done in the **PGM** or the **S**-position of the lock, which then activates the **System keyboard**

3 Files

Files can also be edited in the **PGM** or **S**-position of the control lock. The screen shown is the one defined as the user mode which is active in the **PGM** position. To access system programming mode turn to the **S**-position. The **S**-position is not indicated on the lock, it requires a special key (**C**) and is one position below the **PGM**-position.

User	programming	mode,	PGM	position
------	-------------	-------	-----	----------

1]	PLU	13]	Keyboard
2]	Department	14]	Salesperson
3]	Group	15]	Time zones
4]	Modifier	16]	Discount
5]	Clerk	17]	Condiment
6]	Tax		
7]	Time & date		
8]	Foreign currency		
9]	Receipt trailer		
10]	Receipt header		
11]	Slip header		
12]	PB# text strings		

System programming mode, S-position

1]	PLU	13]	Keyboard
2]	Department	14]	Salesperson
3]	Group	15]	Time zones
4]	Modifier	16]	Discount
5]	Clerks	17]	Condiment
6]	Tax table	18]	System text
7]	Time & date	19]	Error message
8]	Foreign currency	20]	Day text
9]	Receipt trailer	21]	Month text
10]	Receipt header	22]	Tendering
11]	Slip header	23]	PO & RA
12]	PB# text string	24]	Corrections \downarrow

The \downarrow character indicates there are more lines than can be shown on the screen. Press the Page down key to display the remaining options

System programming mode screen 2

25]	Drawer text
26]	PB# functions
27]	Report
28]	System flag
29]	Hardware test

4 Change descriptors

The system offers a programmable alpha keyboard to simplify descriptor programming. Standard character set includes German and Scandinavian characters. Also Caps Lock, Caps shift and back space. The keys become active when the cursor is on the descriptor.

5 PLU file.

Enter 1 on the **Type-key** to select the file. The display will show the first record. If this is not the PLUnumber to be changed, enter the PLU-number and press the **#**-key (for example 123 for PLU-number 123).



Note: Only the active number of price levels are shown, cost price and Tare Qty only if active. These parameters are set in the set up section for Plu's in the constructor.

5.1 Descriptor.

5.2 Sales prices.

Enter the sales price for level 1, 2, 3 and 4. Press **CR**-key to accept. Only the active number of price shifts are shown. If only 1 price shift is active then only 1 price is shown. The number of price shifts is programmed using the constructor.

5.3 Department link

The display will show the department number this PLU is linked to If this is not correct enter the department number and press the **CR**-key.

5.4 Condiment table.

Position the cursor on **Condiment table#** and enter the condiment table number (0 - 99) this item is linked to. A condiment table is a programmed list of choices that are displayed after an item is registered. A chain of condiments, are several tables that will be sequentially displayed after an item is entered.

5.5 PLU-link.

Position the cursor on **Plu link#** and enter the plu# the operating system must recall with the item. Press **CR**-key to accept. If the link is already correct press the **CR**-key without entry. 0 means no link.

5.6 PLU-link qty.

Position the cursor on **Link qty**, enter the quantity activated with this PLU, and press **CR**-key. If this PLU is a linked from another PLU the field is considered as the quantity.

Important: It is possible to create an endless loop, by linking a PLU# to the start of the link. The software does not check if such a loop is created. A link PLU can have a random number.

5.7 PLU-tare qty.

If the PLU is set as a scalable item the tare weight is stored. Tare weight can be stored automatically through a procedure (see below) During transactions the weight stored in this field is deducted from the weight received from the scale and then multiplied with the sales price. For the moment only an Epelsa scale (model BC-050, checkout system 2000) is supported. The scale can only be connected to port 2 of the Sensei. For cable lay-out refer to the scale documentation.

To set the tare weight through a scale connected to the Sensei. Control key to VOID position. Enter 6 on SubTotal key. Put the item on the scale. Select the item for

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which the tare weight must be set by either register it as a PLU# or press the preset item key. Now the weight from the scale is set as the tare weight for this item. Continue until all items are set, then press the subtl key to end the procedure.Text "Tare Weight" is programmable in Program Captions

5.8 PLU Options.

There are 16 options divided over 2 lines, options high and options low.

Options low:

Option 1: If on the PLU is negative;

- Option 2 : If on the PLU is a condiment. A condiment PLU will change the main item price either by adding or subtracting The amount is stored in price level 1 or 2. If the amount is stored in price level 1 the amount is subtracted from the main PLU, if the amount is stored in price level 2 the amount is added to the main PLU-price. To select the price level in a condiment PLU, 2 separate shift functions can be programmed on the keyboard. Condiment plu's are printed in red on an impact printer, and in inverse on a thermal printer. If the quantity is 1 the quantity is not printed, when the price is 0,00 the price is also not printed on the kitchen printer.
- Option 3 : If on print single tickets
- Option 4 : If on print double tickets (set also option 3 to on) On the second ticket Special Caption 50 is printed.
- Option 5 : PLU is menu plu. A menu plu indicates that the quantity entered for this plu is the quantity counter for the linked condiments table. For example 5 Big Mac Menu (Menu Plu) then we can choose from the linked condiment table either Coca Cola or Sprite then the quantity of Coca Cola + quantity of Sprite must be equal to 5. This is controlled by the software It is not possible to enter less or more than 5. So if somebody don't want drink it must be one condiment in the table with name No Drink. A special shift key, (a fixed function called NO). This will select price level 2 for the condiment plu and as a negative amount. This can be used for menu's when the customer doesn't want a certain item. The price can be different. You can program the key NO through the keyboard section of the Constructor.
- Option 6 : Single item sales, as the **first** registration, transaction will be finalised by selecting record 1 in the tendering file;
- Option 7: If on, condiments are not printed on the guest check;
- Option 8 : If on the condiment price is printed on the guest check.

Options high.

- Option 1: Scale compulsion;
- Option 2 : Future use;
- Option 3 : Print on the PLU-report the time item sold for the first and last time;
- Option 4: Future use;
- Option 5: Each article shift will use the descriptor for level 0 only;
- Option 6 : Add to discount itemizer 1;
- Option 7 : Add to discount itemizer 2;
- Option 8 : Open PLU;

Position the cursor on the option and press the **OPT**-key. If the option is not active it is activated, if active it is de-activated. The option key toggles the status of each option.

Note: An * left from the character indicates that this option is active Note: Red printed option are not active.

5.9 PLU print/display.

Position the cursor on **PRINT & DISPLAY**. The field indicates where and how to print and display. Each flag is activated or deactivated using the **OPT**-key.

Print & Display Flag J Print on Journal; Print & Display Flag R Print on Receipt;

Print & Display Flag H Print Double Height only on R/J;

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Print & Display Flag SPrint on Slip;Print & Display Flag CSlip Compulsory;Print & Display Flag O:Display on operator displayPrint & Display Flag U:Display on customer displayPrint & Display Flag V:Skip logo print.

Note: An * left from the character indicates that this option is active.

5.10 Remote printer.

On the line **REMOTE PRINTER** each printer is activated or deactivated using the **OPT**-key.

Note: An * next to the character indicates that this option is active

5.11 Tax.

Position the cursor on **TAX** to set the tax group assignment. Use the **OPT**-key to activate or deactivate that tax group. During a transaction the tax selection can be changed using a tax shift key. There are 2 types of tax shift keys, a temporary one and a permanent one. The temporary one is only active for one item with-in a transaction. A permanent tax shift remains active for the complete transaction. A tax shift changes tax 1 assignment into tax 2 and tax 2 to tax 3. It doesn't influence the other tax itemisers (4 through 8). System parameter 106 (option 4, value 8) will automatically activate modifier 1 if a tax shift (either permanent or temporary is used). Use this modifier 1 print on the remote printer, EAT-OUT to indicate to the kitchen the item or items in case of a permanent tax shift need to be packed for the customer.

5.12 Happy hour selection.

Is set in time bands, the price level set for the time band will select the different price level for the item.

This concludes programming of the PLU-details, you may continue with the next PLU. The register will show the next sequential PLU. You may select a different one by entering the number and the **#**-key.PLU report structure.

PLU			
Gross sales Amount		99999999999	
Customer count		9999	
	Quantity count	9999999,999	
Discount	Amount	99999999999	
Inventory	Quantity	9999999,999	

Amount print format for gross sales and discount is as set in system parameter 1, refer to page: 58. During reporting the net sales is calculated as gross sales -/- discount. A maximum of 4 period to date reports is supported. The Constructor (from version 1.2.11) can be used to modify the record structure.

5.13 Inventory adjustments.

If the application supports inventory per PLU, you may add or subtract from the PLU-Inventory counters. Turn the lock to the VOID-position to add to the inventory enter 1 on the SUBTTL-key, or 2 to subtract. Then enter the quantity followed by the multiply-key followed by the PLU-number to be adjusted and hit the PLU#-key. If the application has been set to keep track of inventory as well at an amount the procedure is the same, but then the procedure is as follows. Enter the quantity followed by the amount followed by the multiply-key and then the PLU#-number to be adjusted and hit the PLU#-key. The actual inventory is displayed.

To finalise the procedure press the SUBTTL-key again. The inventory amount tracking can be against cost, this option is activated in the Constructor.

5.14 PLU-price change.

You may change the sales price per PLU as discussed by following the following procedure:

* Lock to VOID-position

* Enter 3 on the Subtotal-key

Display shows PLU PRICE CHANGE, register prints message#48 (Price Change) on Version 0.6 March 29, 2001 Page: 15

the receipt.

Enter the new price, followed by the Multiply-key followed by the PLU# or PLU-preset key

• Press Subtotal-key when all prices have been changed.

5.15 Look-up window & department key.

To facilitate the operator to look-up items from the file, program on the keyboard a key with a plu set as an open plu. Press this key without entry and all items linked to the same department as this plu will be displayed. This key also functions as an open department key, an entry on the key set as an open plu will be processed as an entry on the key.

6 Department-file.

Enter 2 on the **Type-key** to select the file. The display will show he first record. If this is not the record-number to be changed, enter the number and press the **#**-key



6.1 Amount limit.

Position the cursor on the amount limit. Maximum amount is set via 2 digits, first digit is the number followed by the number of zeroes, then press the **CR**-key. For example to set a maximum amount of 20000 enter 24 (2 with 4 zeroes). If no amount limit is set enter 0 and press the **CR**-key.

6.2 Group assignment.

After the descriptor has been entered, enter the group number in which this department is to be consolidated, and press the **CR**-key.

6.3 **Rate**.

Program the rate max 99.99 which calculates the sales commission on a clerk and/or sales person report. In this case the clerk and salesperson must be set to track departments.

DEPARTMENT				
Gross sales	Amount	9999999999		
	Customer count	9999		
	Quantity count	999999,999		
Discount	Amount	99999999999		
Amount print format for gross sales and				

6.4 Department report structure.

and supported. The Constructor (from version 1.2.11) can be used to modify the record structure

discount is as set in system parameter 1, refer to page: 58. During reporting the net sales is calculated as gross sales -/- discount. A maximum of 4 period to date reports is

7 Groups.

Groups are used to consolidate departments. Enter 3 on the **Type-key** to select the file. The display will show he first record. If this is not the record-number to be changed, enter the number and press the **#**-key



7.1 Descriptor.

7.2 Rate.

Program the rate max 99.99 based on the net sales which calculates the sales commission on a clerk and/or sales person report. In this case the clerk and salesperson must be set to track groups.

7.3 Options.

Currently no options are supported, they are for future enhancements.

7.4 Report structure.

GROUPS				
Gross sales	Amount	99999999999		
Customer count		9999		
	Quantity count	999999,999		
Discount	Amount	99999999999		

Amount print format for gross sales and discount is as set in system parameter 1, refer to page: 58. During reporting the net sales is calculated as gross sales -/- discount. A maximum of 4 period to date reports is supported. The Constructor (from version 1.2.11) can be used to modify the record structure.

Note: Red printed option are not active

8 Modifiers.

Modifiers are extra instructions for the bartender or cook like "NO ICE" "EXTRA SALT" etc. Enter 4 on the **Type-key**.. Position the cursor on the modifier to be changed and entering the characters is as explained in page 12. Each modifier has a fixed length of 24 characters

8.1 Modifier group.

With modifier groups the modifiers are grouped together to facilitate locating the modifier by the operator. Enter the group number and press the **CR**-key.



8.2 Options.

Currently no options are used.

Clerks.

Enter 5 on the **Type-key**. The display will show he first record If this is not the number to be changed, enter the number and press the **CR**-key (for example 5 for clerk number 5).



8.3 Descriptor.

8.4 Job code.

For each clerk 4 different job codes can be set. For each job the time worked is maintained. When a clerk signs on the job code is displayed in the screen, it is compulsory to select one.

8.5 Pay rate.

The pay rate is the rate per hour for each clerk. The system doesn't maintain separate rates per job code.

8.6 **Overtime factor.**

If over time the pay rate is multiplied by this factor.

8.7 **Over time start**.

If D overtime starts after 8 hours, if W overtime starts after 40 hours.

8.8 Options.

Options low:

- Option 1: If on then this clerk is a training clerk, sales data is **ONLY** added in this clerk, the consecutive number is not incremented and data is not printed on the journal tape;
- Option 2: If off all reports are allowed else only clerk report 3;
- Option 3 : If off then Z reports are allowed;
- Option 4 : If off then programming is allowed;
- Option 5 : If on drawer 1;
- Option 6 : If on drawer 2.
- Option 7 If on this is a master clerk. A master clerk is allowed to override the clerk fixed to a PB# option. The master clerk can add to the PB#, only accessible by the clerk who opened the PB#, but the sales data is stored in the report of the clerk who opened the PB#, and not in the master clerk report. Sales data without PB# are reported by the master clerk, and also when the master clerk opens a PB# that data is reported by the master clerk.
- Option 8: If on compulsory tip entry when clocking out;

Options high

- Option 1: if on paid breaks
- Option 2 if on manager required to clock-in;
- Option 3 if on manager required to clock-out;
- Option 4 if on manager required to job code change;
- Option 5 if on enforce out for break;
- Option 6 if on enforce job code selection at clock-in;
- Option 7 if on drawer 3;
- Option 8 Future use

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Note: Red printed option are not active

Position the cursor on the option and press the **OPT**-key. If the option is not active it is activated, if active it is de-activated. The option key toggles the status of each option.

Note: An * left from the option indicates that this option is active.

8.9 Time keeping.

The system supports time keeping for each employee. The employee is identified by touch lock or clerk key, or credit card reader. For each individual employee the system keeps the data over max 4 period to date reports.

8.10 Secret clerk.

In parameter 5 option 8 enforces to enter a 4 digit numeric password each time a clerk signs-on. The password is the first 4 characters (digits only) of the clerk descriptor. The code is neither displayed nor printed. The procedure is as follows:

- 1 Clerk enters his clerk number (or pushes his key)
- 2 Display shows CODE ?
- 3 Clerk enters the secret code, on the clerk key (entry is not displayed)
- 4 When the code is ok, clerk is selected.

8.11 Report structure.

The data to be tracked for each individual clerk can be set in the system parameters. **Note: Red printed option are not active**

9 Tax.

Enter 6 on the **Type-key**. The display will show he first record If this is not the number to be changed, enter the number and press the **CR**-key.



9.1 Descriptor.

9.2 Tax rate.

Position the cursor on **RATE** enter the tax rate, maximum rate is 99.99%.

9.3 Tax options.

The register supports for each individual tax itemizer the following options. To set the options position the cursor on **OPTION** and enter a **Y** to set the option flag or a **N** to de-activate the option.

- Option 1 If on VAT-type tax, if off then ADD-ON type tax. Refer also to paragraph 22 page: 21.
- Option 2: If on print, in case of VAT then print VAT-details on bottom receipt;
- Option 3 : If on print always even when VAT-details are zero;
- Option 4 : If on GST type. Tax calculation is based on subtotal + tax 1 + tax 2 + tax 3.
- Option 5: If on in combination with a VAT-type tax, the net amount is printed on the receipt and on the report. In combination with ADD-ON tax the taxable amount is printed as well.
- Option 6 If on table type tax.
- Option 7 : If on the tax amount is calculated on the amount -/- the exempt amount

Position the cursor on the option and press the **OPT**-key. If the option is not active it is activated, if active it is de-activated. The option key toggles the status of each option.

In case of tax shifts for different tax calculations for eat-in and eat-out restaurants, one can set to print automatically modifier #1 on the remote printer, to signal the preparation area the item as a "eat-out" item.

Note: An * left from the character indicates that this option is active.

9.4 Tax exempt.

Any sales amount below this amount is not taxed. Amounts larger will be taxed. **Note: Red printed option are not active.**

9.5 Table tax.

If a taxtable is set as a break point tax table the screen layout is different:



For example 6%, find the whole number that when multiplying by the percent rate (4 decimal places) will come close to 99 as possible without going over 99

14 X 6.0000	=	84.000
15 X 6.0000	=	90.000
16 X 6.0000	=	96.000
17 X 6.0000	=	102.000

. .

. .

In this case 16 comes as close to 99 without going over 99. Multiply the whole number then by 100, in this example 16 X 100 =1600. 1600 is the tax calculation first number. Multiply the number by the percent rate (using 4 decimals) in this example 16 X 6.0000 = 96 96 is the tax calculation second number. The break points must be calculated using a published tax chart. A break point is set by what taxable sales amount would create an additional 0.01 tax.

Example tax chart				
Tax charged	Low side	High side	Break points	
\$.10 minimum non taxable amount	00	.00	.10	
\$.01 first tax amount charged	01	.11	.21	11
-	02	.22	.38	11 non repeat
	03	.39	.56	17 breaks
	04	.57	.73	18
	05	.74	.91	17
	06	.92	1.08	18
	07	1.09	1.24	17 repeat
	08	1.25	1.41	16 break
	09	1.42	1.58	17 pattern
	10	1.59	1.74	17
	11	1.75	1.91	16
	12	1.92	2.08	17
	13	2.09	2.24	17
	14	2.25	2.41	16
	15	2.42	2.58	17
	16	2.59	2.74	17
	17	2.75	2.91	16
	18	2.92	3.08	17
	19	3.09	3.24	17
	20	3.25	3.41	16

Determine the non repeat breaks. The beginning break points which do not fit into the repeat break pattern are referred to as the non repeat breaks. In this example 11,11,17,18,17,18 **Determine the repeat breaks**.

The break points that repeat in a set pattern are referred to as the repeat breaks. This pattern can usually be determined by comparing the low side dime and penny rows to some \$1.00, \$2.00 or \$3.00 etc. range of dime and penny rows. In the above example the repeat brake pattern is identified as follows

1.09, 1.25, 1.42, 1.59, 1.75, 1.92 2.09, 2.25, 2.42, 2.59, 2.75, 2.92

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17, 16, 17, 17, 16, 17 are the repeat breaks.

To program the tax table:

- □ Prompt to enter tax calculation first number (1600 in this case)
- □ Prompt to enter tax calculation second number (96 in this case)
- Prompt to enter the maximum non taxable amount (10 in this case)
- Prompt to enter the first tax amount charged (.01 in this case)
- **\square** Prompt to enter the non repeat tax break s(11,11,17,18,17,18) in this case)
- □ Prompt to enter the repeat tax break (17,16,17,16,17 in this case)

The pattern repeats itself for every additional dollar in sales. The number of repeat breaks matches the percentage, 6% has 6 breaks per dollar 7% has 7 breaks per dollar

9.6 Report structure.

	TAX	
Taxable amount	Amount	99999999999
Tax amount	Amount	99999999999
Net amount	Amount	9999999999

Note: Red printed option are not active

Amount print format is as set in system parameter 1, refer to page: 58.

10 Time & date.

The system maintains a battery backed real time millennium proof clock Enter 7 on the **Type**-key.

```
Time & date
Time 14:15:36
Date Sat 28 Aug 1999
```

To change the time enter the time in either 24 or AM/PM format. In AM/PM format 01100 set the clock to 11:00 in the morning, 11100 sets the clock to 11:00 in the evening.

To change the date enter the day of the week: Monday = 1 Tuesday = 2 Wednesday = 3 Thursday = 4 Friday = 5 and Saturday = 6 Sunday = 7

11 Foreign currency.

Enter 8 on the **Type-key** to select the file. The display will show he first record. If this is not the record-number to be changed, enter the number and press the **#**-key



11.1 Descriptor.

11.2 Buying rate.

The buying rate is max 6 digits. Depending on the format of the local currency the rate is xxx.xxx when local currency is x.xx or x.xxxx when local is xxx. Enter the rate and press the **CR**-key.

11.3 Selling rate.

This rate is used to calculate the change amount (if any) in the local currency. The selling rate is max 6 digits. Depending on the format of the local currency the rate is xxx.xxx when local is x.xx or x.xxxx when local is xxx. Enter the rate and press the **CR**-key

11.4 Options.

The register supports the following options for each individual currency.

- Option 1: If on then this currency has no decimals;
- Option 2: If on then change amount is calculated in the last currency (using selling rate);

Option 3: If on this currency is used to calculate the Euro;

Option 4 - 8: future use.

Position the cursor on the option and press the **OPT**-key. If the option is not active it is activated, if active it is de-activated. The option key toggles the status of each option.

Note: An * left from the option indicates that this option is active

11.5 In drawer totalizers.

The in-drawer totalizer in which each currency-key must count is programmed, enter a number from 1 to 8 and press the **CR**-key. Enter 0 in case to set this option to OFF.

11.6 Prefix.

Three characters (**PREFIX 1 PREFIX 2 PREFIX 3**) to indicate the kind of foreign currency, for programming refer to paragraph 2 press **CR**. Program the character command for the Euro.

11.7 Drawer.

To open a separate drawer then the one programmed for the active clerk.

11.8 Report structure.

FOREIGN CURRENCY				
Net amount Amount 99999999				
	Customer count	9999		

Amount print format is as set in system parameter 1, refer to page: 58. The Constructor (from version 1.2.11) can be used to modify the record structure.

12 Receipt trailer.

Enter 9 on the **Type-key**. Enter the descriptor press **CR**. To program the next line, move the cursor down 1 line The register supports 12 lines

13 Receipt header.

Enter 10 on the **Type-key**. Enter the descriptor press **CR**. To program the next line, move the cursor down 1 line. The register supports 12 lines

14 Slip header.

Enter 11 on the **Type-key**. Enter the descriptor press **CR**. To program the next line, move the cursor down 1 line. 16 lines are supported.

15 Slip trailer.

Enter 12 on the Type-key. Enter the descriptor press CR. 16 lines are supported.

16 Scroll message on customer display.

Select through the cursor-keys the line **Scroll message** or enter 13 on the **Type-key**. Enter the descriptor press **CR**. The message has a total length of 64 characters.

17 Special print & display instructions.

In the text string an identifier indicates a specific information to be displayed or printed. The identifier is in between brackets [] A n underscore character indicates bold face. The following are supported:

- [T] will display or print the current time.
- [D] will display or print the date.
- [C] will display or print active clerk.
- [#] will display or print consecutive number.
- [L] will display or print location number.
- [E] will display or print terminal number.
- [S] will display or print active salesperson.
- [GX] will print graphic image number X
- Note: Red printed option are not active

18 PB# text string.

The system features a 1 line character text string to identify an account. Enter 12 on the **Type-key** to select the file. The display will show the first record. If this is not the record-number to be changed, enter the number and press the **#**-key



19 Keyboard.

If linked to the manager position the key can only be operated in the VOID-position of the lock. To link a key to the manager position with the cursor on the keynumber press the **OPT**-key. If linked to the manager position an * is shown next to the key position. Enter 13 on the **Type-key**.

Keyboard	(1↓)		
1-XXXXX	11-XXXXX		
2-XXXXX*	12-XXXXX		programming mode
3-XXXXX	13-XXXXX		
4-XXXXX	14-XXXXX		
5-XXXXX	15-XXXXX		
6-XXXXX	16-XXXXX		
7-XXXXX	17-XXXXX		
8-XXXXX	18-XXXXX		
9-XXXXX	19-XXXXX		
10-XXXXX	20-XXXXX		

20 Sales person.

The OS can track sales data by sales persons, the data to be tracked is set in the system parameters. Enter 14 on the **Type-key**. The display will show the first record. If this is not the number to be changed, enter the number and press the **#-key**



20.1 Options.

Currently no options are supported for individual sales persons

20.2 Report structure.

The data to be tracked for each individual sales person can be set in the system parameters.

21 Time bands.

The OS can track sales data by hour of the day, the data to be tracked is set in the system parameters. The time bands (48) can be programmed. enter 15 on the **Type-key**. The display will show The first 20 records. If this is not the number to be changed, press the page down key.



21.1 Price shift selection.

Set the price shift level (max 4) that is activated at this time. Used to program happy hour price selection. When active the other plu price shift functions (stay active etc.) are overridden by the OS.

21.2 Report structure.

The data to be tracked for each in time band can be set in the system parameters.

22 Discount.

Enter 16 on the **Type-key**. The display will show the first record If this is not the number to be changed, enter the number and press the **#**-key (for example 5 for correction function -number 5).



22.1 Descriptor.

22.2 FIXED.

In case the key must function as a pre-set discount amount key enter the amount; in case of a percentage enter the rate.

22.3 Maximum discount.

Position the cursor on Maximum discount and enter the maximum amount or percentage allowed

22.4 Discount options.

The type of each individual discount-key is set by the first two options. The register supports the following types of discount:

Options low:

- Option: 1; 1 2
 - N N Fixed Discount;
 - Y N Open discount;
 - N Y Open / Fixed discount;
- Option 3 : If off then discount is percentage, if on amount;
- Option 4 : If off the function subtracts, if on it adds;
- Option 5: If off the discount is a subtotal discount else an item discount;
- Option 6 : If on print the subtotal and the discount itemizers;
- Option 7: If on the subtotal discount is calculated for all previously entered items;
- Option 8 : If on a discount function set as an item discount will act as a subtotal discount if the subtotal function is activated before the discount function. In case of add-on tax the taxable itemizer is not influenced by the calculation, the tax is still added on the amounts excluding the discount. Subtotal discount is recalculated on each item registered so far in the transaction.

Options high:

- Option 1: Discount is based on the amount stored in discount itemizer 1
- Option 2: Discount is based on the amount stored in discount itemizer 2
- Option 3 8 Future use.

Position the cursor on the option and press the **OPT**-key. If the option is not active it is activated, if active it is de-activated. The option key toggles the status of each option.

An * left from the option indicates that this option is active

When the discount is programmed as fixed the **FIXED** field contains either the rate or amount. When the discount is open the entry is compulsory and the maximum entry allowed is stored in the **Max**

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discount field. When the discount is open/fixed the discount is taken from the **FIXED** field if no entry and must be less than the **Max discount** field.

22.5 Print/display.

Position the cursor on **PRINT & DISPLAY**. The field indicates where and how to print and display. Each flag is activated by entering a **Y** or de-activated by entering a **N**:

Print & Display Flag JPrint on Journal;Print & Display Flag RPrint on Receipt;Print & Display Flag HPrint Double Height only on R/J;Print & Display Flag CPrint on Slip;Print & Display Flag CSlip Compulsory;Print & Display Flag O:Display on operator displayPrint & Display Flag U:Display on customer displayPrint & Display Flag U:Skip logo print.

The print construction is also used during reporting, if for example in the function the print on receipt is OFF and also in the report print construction the record is not printed.

22.6 Tax.

If the discount must influence one of the maximum 8 different tax itemizers set the appropriate number to \mathbf{Y} if not set to \mathbf{N} The most left digit is tax itemizer 0

22.7 Report structure.

DISCOUNT		
Net amount	Amount	99999999999
	Customer count	9999

Amount print format is as set in system parameter 1,refer to page: 58. The Constructor (from version 1.2.11) can be used to modify the record structure.

23 Condiment table/list.

A condiment table is a programmed list of choices that are displayed after an item is registered. Enter 17 on the **Type-key** Display will show the first record, press the **CR**-key to accept, or select the required record by entering the number and press the **#**-key. Each list consists of a maximum of 16 choices.



23.1 Options.

- Option 1: Multiple choices from the list Y/N (if Y list stays on the screen);
- Option 2 : Multiply Y/N. If set to yet, the total number of condiments must match the quantity of the item registered. For example for 8 PC chicken a total number of 8 condiments must be entered.
- Option 3 : Exit from condiment list allowed Y/N.
- Option 4 : Condiment table is linked
- Option 5 : Future use;
- Option 6: Future use;
- Option 7 : Future use;
- Option 8 : Future use.

Condiments are always printed in red on an impact printer, and in inverse on a thermal printer. Position the cursor on the **OPTION**- press the **OPT**-key to activate or deactivate the option. The option key toggles the status of each option.

Note: An * left from the option indicates that this option is active

23.2 Condiment table link.

This field contains the next condiment table displayed to enforce the operator to make a choice.

24 System text. The various messages, and descriptors printed by the register, can be programmed through the keyboard of the register

25 Tendering.

Tendering keys are used to finalise a sales like CASH, VISA etc. Enter 22 on the **Type-key** to select the file. The display will show he first record. If this is not the record-number to be changed, enter the number and press the **#**-key



25.1 Descriptor.

25.2 Preset tender.

An amount activated with this key, processed as a tendered amount on the tendering function.

25.3 Max. tendered amount.

The maximum amount allowed to be tendered on this key.

25.4 Options.

The register supports the following options:

- Option 1: If on the active drawer assigned to the clerk is opened at the end of the sale;
- Option 2: If on amount tender compulsory;
- Option 3: If on no amount tender allowed;
- Option 4 : If on compulsory to enter a number (like credit card etc.);
- Option 5 : If on change amount is regarded as tip;
- Option 6 : If on no tax is calculated with this tendering key;
- Option 7: If on this function handles EFT;
- Option 8 : If on this is a pre-set tender key.

Position the cursor on the **OPTION**- press the **OPT**-key to activate or deactivate the option. The option key toggles the status of each option.

Note: An * left from the option indicates that this option is active

25.5 Print/display.

Position the cursor on **PRINT & DISPLAY**. The field indicates where and how to print and display. Each flag is activated by entering a **Y** or de-activated by entering a **N**:

Print & Display Flag JPrint on Journal;Print & Display Flag RPrint on Receipt;Print & Display Flag HPrint Double Height only on R/J;Print & Display Flag CPrint on Slip;Print & Display Flag CSlip Compulsory;Print & Display Flag O:Display on operator displayPrint & Display Flag U:Display on customer displayPrint & Display Flag U:Skip logo print.

25.6 In drawer totalizers.

The in drawer totalizer tracks data as cash in drawer, credit card in drawer, checks in drawer etc.

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Each tendering function can be linked to 1 in drawer totalizer. The display shows **DRAWER1**, enter the number and press the **CR**-key to accept. The register supports a special over tendering counter (**OVER TENDER**). If option 5 is On, the change amount (if any) on that tendering key is not subtracted from the drawer totalizer number 1 but added to the drawer totalizer number entered in this field. In this way the register is capable to track tips per individual clerk.

25.7 Report structure.

	TENDERING	
Net sales	Amount	99999999999
	Customer count	9999

Note: Red printed option are not active

Amount print format is as set in system parameter 1, refer to page: 58. Reports the sales paid for by this tendering key. The Constructor (from version 1.2.11) can be used to modify the record structure.

26 PO & RA functions.

Enter 23 on the **Type-key** to select the file. The display will show he first record. If this is not the record-number to be changed, enter the number and press the **#**-key The first field is the descriptor, page 12.



26.1 PO & RA descriptor.

26.2 Options.

The register supports the following options:

- Option 1: If on the open drawer;
- Option 2 : If on not single item, finalise with a tendering-key;
- Option 3 : If on PB related (deposit);
- Option 4 : If on then RA function;

Option 5 - 8 : Future use;

Position the cursor on the **OPTION**- press the **OPT**-key to activate or deactivate the option. The option key toggles the status of each option.

Note: An * left from the option indicates that this option is active

26.3 Print/display.

Position the cursor on **PRINT & DISPLAY**. The field indicates where and how to print and display. Each flag is activated by entering a **Y** or de-activated by entering a **N**:

Print & Display Flag JPrint on Journal;Print & Display Flag RPrint on Receipt;Print & Display Flag HPrint Double Height only on R/J;Print & Display Flag SPrint on Slip;Print & Display Flag CSlip Compulsory;Print & Display Flag O:Display on operator displayPrint & Display Flag U:Display on customer displayPrint & Display Flag U:Skip logo print.

26.4 In drawer totalizers.

To set the in-drawer totalizer in which each individual PO- & RA-key must count is programmed. Position the cursor on **DRAWER** and enter the in which this PO RA function must subtract or add. Set to 0 if no other counters need to be updated. In that case the display shows **OFF**.

26.5 Report structure.

PAID OUT & RECEIVED ON ACCOUNT				
Net amount	Amount	99999999999		
	Customer count	9999		

Amount print format is as set in system parameter 1, refer to page: 58. The Constructor (from version 1.2.11) can be used to modify the record structure.

27 Corrections.

These functions are used correct wrong entries. Enter 24 on the **Type-key** to select the file. The display will show he first record. If this is not the record-number to be changed, enter the number and press the **#**-key



27.1 Descriptor.

27.2 Options.

The combination of the fist three option flags define the type of correction function:

- Option 1 : If on Void. A void-function automatically cancels the previous line. To void a function the void key is pressed immediately after the item has been registered
- Option 2 : If on Correction. A correction-key on the register allows the operator to correct only those items that have been registered during the transaction. As a result a transaction can never start with a Correction function except in the case of a PB#. In this case the system will check if the item has been posted to a PB#, if so it will be corrected. It is possible to correct items via the cursor control keys.
- Option 3 : If on Refund. A refund-key on the register is used to correct items outside a transaction, there is no check if the item has been registered or not.
- Option 4 : If on Cancel type 1. This function will subtract all items entered, it functions as a "stay active refund function". Cancel transactions are not printed on the KP !
- Option 5 : If on Cancel type 2. This function will subtract all items entered, it functions as a "stay active refund function". The registrations are not printed on the journal tape, and the consecutive number is not incremented. Cancel transactions are not printed on the KP!
- Option 6 : If on Transaction void. This function will cancel the complete transaction, even when the transaction has already been finalised. Can not be used outside a transaction.
- Option 7 : If on transaction void can be used outside the transaction in the MGR-position. This will correct the last ticket
- Option 8 : Future use;

Position the cursor on the **OPTION**- press the **OPT**-key to activate or deactivate the option. The option key toggles the status of each option.

27.3 Print/display.

Position the cursor on **PRINT & DISPLAY**. The field indicates where and how to print and display. Each flag is activated by entering a **Y** or de-activated by entering a **N**:

Print & Display Flag JPrint on Journal;Print & Display Flag RPrint on Receipt;Print & Display Flag HPrint Double Height only on R/J;Print & Display Flag SPrint on Slip;Print & Display Flag CSlip Compulsory;Print & Display Flag O:Display on operator displayPrint & Display Flag U:Display on customer displayPrint & Display Flag V:Validation print, with compulsory paper in the slip printer.

The print construction is also used during reporting, if for example in the function the print on receipt

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K.I.S. Operating system is OFF and also in the report print construction the record is not printed.

27.4 Report structure.

CORRECTION				
Net amount	Amount	99999999999		
	Customer count	9999		

Amount print format is as set in system parameter 1, refer to page: 58. The Constructor (from version 1.2.11) can be used to modify the record structure.

28 In drawer totalizers.

Position the cursor on **IN DRAWER** and press **Type-key** or enter 25 on the **Type-key** to select the file. The display will show he first record. If this is not the record-number to be changed, enter the number and press the **#**-key



28.1 Descriptor.

28.2 Options.

The register supports the following options for each individual in drawer totalizer. Option 1 :If on no decimal point in the amount field; Option 2 : If on this total is not included in the cash declaration report. Option 3 - 8: Future use.

Position the cursor on the **OPTION**-line, enter a **Y** (active) or a **N** (not active) for each individual option flag press the **CR**-key to accept.

Note: An * left from the character indicates that this option is active

28.3 Report structure.

IN DRAWER			
Net amount	Amount	99999999999	

Amount print format is as set in system parameter 1, refer to page: 58. The Constructor (from version 1.2.11) can be used to modify the record structure.

29 PB-functions.

System supports a maximum of 5.000 open PB# at the same time. To facilitate easy bill splitting, orders are tracked by chairs, there are an unlimited number of chairs per table. When the bill is printed one can consolidate all chairs into one bill or print-out separate chairs, or combine chairs into bills. Files are shared among terminals. All registrations are stored in the tracking buffer, including PO, RA, discount. Enter 26 on the **Type-key** to select the file. The display will show he first record. If this is not the record-number to be changed, enter the number and press the **#**-key



29.1 Descriptor.

29.2 Options.

Position the cursor on the **OPTION**-line, enter a **Y** (active) or a **N** (not active) for each individual option flag press the **CR**-key to accept.

Note:	An *	left	from	the	option	indicates	that	this	OI	ption	is	active
									-			

	Option flags 1 through 4				
	1	2	3	4	Function.
1	N	N	N	N	Open/Add/Service with date tracking. This options also tracks tendering keys. Sales is not recorded in the reports until settlement. Can be entered at the start, during or end of the transaction.
2	Ν	Z	Ν	Y	Open/Add/Service without date tracking.
3	Ν	Ν	Y	Ν	Print PB details
4	Ν	Ν	Υ	Y	Print PB details and release paper
5	Ν	Y	Ν	Ν	Future use
6	Ν	Y	Ν	Y	Future use
7	Ν	Y	Υ	Ν	Transfer complete PB#
8	Y	Y	Y	Y	Transfer selected items
9	Y	Ν	Ν	Ν	Combine PB#.
10	Y	Ν	Ν	Y	Combine selected items
11	Y	Ν	Y	Ν	Transfer all PB#'s from active clerk to another clerk.
12	Y	Ν	Y	Y	Display table status
13	Υ	Υ	Ν	Ν	Park order
14	Υ	Y	Ν	Y	Chair
15	Y	Y	Y	Ν	Future use
16	Y	Y	Y	Y	Covers.

Note: options 5 – 8 are currently not used.

- The bill can be printed sorted by group name, the name of the group is then printed as well.
- □ The OS supports both transfer and combine functions. It is programmable that a transfer is only allowed if the other PB# has been activated by the same clerk#. If the transfer clerk-key is used within a transaction (i.e. PB# active) then only that PB# is transferred from one clerk to another; outside a transaction ALL PB# active for the clerk are transferred to the other clerk.
- □ PB#'s can be entered during the transaction, at the beginning, the OS supports PB#-decoding from barcodes or magnetic cards.
- □ If plu's have random numbers in the tracking buffer the random plu# is stored,
- Discounts per item are stored.
- □ If an item is registered with a price of 0, on the bill is printed a special caption (Free of charge);
- □ The PB#-compulsion can be overridden by pressing the key without entry for one transaction.
- □ A PB# cannot be closed unless the bill has been printed, this is an option.
- □ The time elapsed between opening of a PB# and printing can be calculated for each individual PB#. The elapsed time is multiplied by the same PLU# as the PB#. It is programmable if the time calculated is based on minutes, hours or days.
- Drive through function is supported. With park order option. Each time the PB# open/add/service function is pushed the system increments the car number, up to a pre-set maximum number, after which it returns to 1. The pre-set number is the maximum number of the cars in the line. Orders are entered on one terminal and paid-off on the other one.
- If chair tracking is active, the waiter enters the table-number. The system assumes the waiter will start entering the orders for chair 1. To enter the order for chair 2 of the same table, the waiter pushes the chair-key. This will close chair-1 and activate chair-2. Another chair can be entered on the chair-key.

29.3 Print/display.

Position the cursor on **PRINT & DISPLAY**. The field indicates where and how to print and display. Each flag is activated by entering a **Y** or de-activated by entering a **N**:

Print & Display Flag JPrint on Journal;Print & Display Flag RPrint on Receipt;Print & Display Flag HPrint Double Height only on R/J;Print & Display Flag SPrint on Slip;Print & Display Flag CSlip Compulsory;Print & Display Flag O:Display on operator displayPrint & Display Flag U:Display on customer displayPrint & Display Flag U:Skip logo print.

The print construction is also used during reporting, if for example in the function the print on receipt is OFF and also in the report print construction the record is not printed.

Note: It's programmable to suppress the receipt number being incremented when items are posted to a PB, add The OS features the option to store for each PB# 3 lines of text. The text can be used for the name of the customer for instance, and the PB#-feature is then used for Accounts Receivable for instance. If the text string is active the data is printed on all kitchen printer tickets, either printed via the receipt or printer via RS-232.

29.4 Report structure.

PB-FUNCTIONS				
Net amount	Amount	9999999999		

Note: Red printed option are not active

Amount print format is as set in system parameter 1, refer to page: 58. The Constructor (from version 1.2.11) can be used to modify the record structure.

30 Reports.

Position the cursor on **REPORT** and press the **Type-key** or enter 27 on the **Type-key**. The display will show he first record. If this is not the number to be changed, enter the number and press the **CR**-key (for example 5 for report 5).



30.1 Descriptor.

30.2 Report options.

For each individual report number the following options can be set.

Options low:

- Option 1 : If set fires the drawer;
- Option 2 : If set all pointers (i.e. time zones, clerks) are reported, if off only the active pointer is reported;
- Option 3 : If set the consecutive number is reset on a Z-report
- Option 4 : If set the Z-counter is not incremented.
- Option 5: If set a percentage calculation with the total sales in a group and department report is printed. Total sales must be active with-in the period.
- Option 6 Future use;
- Option 7 Password active for this report. The password, are the first 4 positions of the report descriptor.
- Option 8 Cash declaration enforced. Refer to paragraph: For details.

Options high:

Option 1 - 8: future use.

Position the cursor on the **OPTION**-line, enter a **Y** (active) or a **N** (not active) for each individual option flag press the **CR**-key to accept.

Note: An * left from the option indicates that this option is active

30.3 Print/display.

Position the cursor on **PRINT & DISPLAY**. The field indicates where and how to print and display. Each flag is activated by entering a **Y** or de-activated by entering a **N**:

- Print & Display Flag J Print on Journal;
- Print & Display Flag R Print on Receipt;
- Print & Display Flag H Print Double Height only on R/J;
- Print & Display Flag S Print on Slip;
- Print & Display Flag C Slip Compulsory;
- Print & Display Flag O: Display on operator display
- Print & Display Flag U: Not used.
- Print & Display Flag V: Skip logo print.

The print construction of the function being reported is compared with the function set in the report. If both options are on then the data is printed on the assigned printer.

Note:

- □ If a report is flagged to print on the receipt, and the receipt is off (through the Ron/Roff key) the report will be printed on the receipt.
- The report period is entered with the report number. Daily report files 0, weekly 1, monthly 2 and yearly 3. To request weekly report number 5 enter 15 on the RPT-key, 1 indicates the weekly files and 5 is the report number.
- □ If a file (X) or period to date (Y) is not active, the system continues with the report, and doesn't signal an error.

30.4 Type.

Through this parameter, the register is instructed to print the data stored in certain files in the register's-memory. Position the cursor on the **Type**-line the following pointer types are supported:

0: Standard, for department PLU etc, 1: Clerk report, 2: Hourly sales ; 3: Salesperson; 4. Time keeping.

30.5 Report link.

Through these numbers the actual data to be reported is programmed. The link can consist of maximum 16 report numbers.

0 : report total sales;

- 1 : report group sales;
- 2 : report department sales;
- 3 : report PLU-sales;
- 4 : report PO & RA;
- 5 : report in drawer data;
- 6 : report corrections data;
- 7 : report discount data;

8 : report foreign currency;
9: report tax data;
10: report the PB-functions;
11: will report open PB's;
12: Inventory;
13: Time keeping;
14: Future use;
15: Future use.

Note: Red printed option are not active.

30.6 Range report.

To request a range report, enter the start record number on the number key, followed by the last record to be reported followed by the report number. This feature is used to report certain records (like plu's) from the database.

31 Electronic journal.

The journal data is stored in memory and may be printed or requested via the serial upon request. Set SystemParameter 68 to 98. When the journal is 80% full a message is displayed to warn the operator that soon the journal is full. When full 2 options can be set:

- It's no longer possible to continue any registration until the electronic journal is printed, or transferred to a computer;
- □ The terminal will start writing data from the start of the buffer. This means data stored will be erased. All data is stored in the electronic journal that has the Journal-flag active in the print programming. This includes reports!

31.1 Print & View electronic journal.

Enter 98 on the RPT-key in the X (view or print, data is not cleared), Z (view or print and data is cleared) or S-position (clear the journal). The display shows the number of lines stored and the percentage of the available memory occupied. The cursor is set to the last line of the journal. Use the cursor control keys to step through the electronic journal. Press the RPT-key to print the journal from that position to the end. Press the clear key to abort printing. The journal is printed on the receipt printer assigned on that terminal, if this is a shared printer on another terminal data is printed on that terminal. Unless the printer supports more than 50 columns per line 2 columns will be printed to save paper.

31.2 Reset electronic journal.

Enter 98 on the RPT-key in the S position of the lock. Execute this procedure the first time the

K.I.S. Operating system electronic journal is activated, as it will clear any random data in the memory expansion card.

32 Handheld terminal.

The handheld terminal is connected to a terminal via an RS-232 port. To activate communication between the terminal and the base station set SystemFlag 90 to the RS-232 port. Use port number 1, so set SystemFlag 90 to 1. The battery used in the handheld must be 160 Mamps/hour 9 volts

If the terminal to which the handheld is connected is in transaction and no keyboard entry has been done for 15 seconds, the software will, interrogate the base station to check for data. If there is data the current transaction is finalised, and then the data from the base station is processed.

32.1 Keyboard.

The handheld features a display with backlight and a keyboard of 6 X 5 keys. The standard keyboard configuration is as follows:

Table#	PLU#	PRICE	MODIFIER	LOOK-UP
7	8	9		^
4	5	6		\checkmark
1	2	3		
С	0	Х	CORR.	BILL
TOTAL				MENU

It is possible to use the Dallas touch lock in combination with the handheld terminal. There are a few combinations possible:

32.2 Dallas touch key.

32.2.1 Dallas touch lock only on the terminal not on the handheld

In this case you must program the terminal number as secret code for the clerk you want to use to store the handheld sales data. For example handheld number 2 needs "0002CLERK 2" as clerk 2 descriptor. In the handheld the option "HT-NR=KN-NR" must be set to "N". The handheld will use the terminal number as clerk number after you make a RAM CLEAR on the terminal. The handheld will use this clerk number until you select another clerk by entering 0 on the MENU key or sent another one by the register programming mode.(see also 2).

32.2.2 Dallas touch lock the terminal and on the handheld.

In this case the handheld will sent the complete or last digit of the touch-key to the register and the register will select the clerk accordingly. In the handheld the option "HT-NR=KN-NR" must be set to "N". There are two ways to use the clerk key depending on the setting of the option "VOLLE CHIPNR" Option "VOLLE CHIPNR" must be set to "J": For example Clerk Key "XXXXX77DB" is active on the handheld. The sales will be registered on the clerk Key "XXXX77DB" is active on the handheld. The sales to "N". For example Clerk Key "XXXX77DB" is active on the handheld. The sales will be registered on the clerk Key "XXXX77DB" is active on the handheld. The sales will be registered on the clerk Key "XXXX77DB" is active on the handheld. The sales will be registered on the clerk with the code "000BClerk X". The handheld will sent only the last digit of the code. You can activate a clerk on the terminal as follows:

- enter 0 on the MENU key
- handheld will be switched off
- Switch on Handheld
- Handheld will as "CHIPNR"
- Now touch with the key at the top connector.

- Handheld will read the number and use this as clerk number until you enter 0 on the MENU key again.

With the default settings of the handheld controller you can use maximum 4 handhelds. If more are required they must be specially ordered. You can read the handheld number by entering 9999 on the MENU key. You can only change the handheld number if you have a Dallas Clerk key. When you set the option "HT-NR=KN-NR" to "J" the handheld will use the last digit of the next active Dallas key as handheld number. You can only use Handheld number 2, 3, 4 or 5 in the standard system. The handheld delivered by KIS operate on the frequency of 433.500 Mhz.. You can check the frequency on the label inside the battery holder and on the antenna of the controller. Note that they MUST be the same.

32.3 Request table balance by the handheld.

On the Handheld there are two ways to request the balance:

1 - After entering the table# on the Handheld pressing the "OPEN" key on the handheld. Now the handheld will request the balance form the terminal.

2 - When option "TISCHANFRAGE" is set the 'J' the handheld will always ask the balance when you open a table on the handheld. When there is no response it means the communication between the handheld and the terminal is not working. This could be because the terminal is switched off or the battery of the handheld is low.

It is possible to change the handheld number using the cash-register. The current handheld number can be requested on the handheld by entering 9999 on the "MENU" key. It is important that every handheld has its unique handheld number. The available numbers are 2, 3, 4 or 5. When more is required it must be requested!!

The procedure is as follows:

- 1 Connect handheld to base station with cable.
- 2 Enter 1000 on the MENU key of the handheld
- 3 Turn Lock to 'S' on register
- 2 Enter 1100 + (handheld number) on the TYPE key.

1102 will change the number to 2.

When the handheld is initialised, the register will now also set the number of decimals in the amount to the correct value.

32.4 Application program restrictions.

- Maximum Number of CLERKS is 100.
- Maximum Number of ARTICLES in the HANDHELD is 600.
- Maximum Number of DEPARTMENTS is 64.
- Maximum Number of MODIFIERS is 100.
- Maximum Number of PB is 100.

32.5 Application setting of the Sensei.

32.5.1 PB-functions.

The application **MUST** use PB-function number 1 as the Open/Add/Service function, PB-function number 5 **MUST** be the Print/Open function and PB-function number 8 **MUST** be split PB#.

32.5.2 Tendering functions.

Tendering function number 1 **MUST** be Cash.

32.5.3 Correction functions.

Correction function number 3 must be set as Refund.

32.5.4 Price levels.

The system supports up to 3 price levels from the handheld. To activate price levels:

- □ Set in the handheld the option VK-ebene to 2 only first and second price level or to 3 for the first, second and third price level. The price level is entered as 1 2 or 3 on the MENU-key.
- □ To return to price level 1 after each registration of the item, set VK nach PLU to Yes.
- To return to price level 1 after a transaction, so the selected price level will remain active during the transaction, set VK nach Total to Yes.
- □ When both options (VK nach Total and VK nach PLU) are active the selected price level will remain active until a new price level is selected.

32.6 Power safe function.

On the back of the unit is a button, push this button to activate the handheld. The unit features a

power safe mode which will switch to standby after 30 seconds.

32.7 File down loading.

The PLU, and modifier files are stored in the memory of the handheld. This file must be downloaded into the handheld from the terminal. Each time the user modifies some items he must download the modified file in each individual handheld. Connect the handheld with the base station using the cable that comes with the system. Then follow the steps:

- Enter 1000 on the handheld and press the most right down button (MENU)
- Set the control lock on the terminal in the S-position.
- Enter 1000 on the terminal and press the TYPE key.

32.8 Clerk number.

Each handheld is processed by the terminal as a clerk. To connect the handheld terminal with a specific clerk the procedure is as follows:

Connect the handheld with the base station using the cable that is supplied with the system. Then follow the steps:

- Enter 1000 on the handheld and press the most right down button (MENU)
- Set the control lock on the Nitsuko in the S-position.
- Enter 1000 and the clerk number assigned to that terminal on the Nitsuko and press the TYPE key.

32.9 Touch memory on the handheld.

Clerks can use their Dallas Touch Memory also with the handheld. In this case the Dallas keys must be keys of which the last digit ranges from 1 through F.

- Sign-Off the current clerk by entering 0 on the Menu key.
- Switch on the handheld, by pressing the key on the back of the handheld. The terminal prompts with CHIP.
- Touch the Dallas key on the sensor positioned on the top right position on the cabinet.

Note:

- To activate this feature: Zet in de setup de optie "VOLLE CHIPNR" op NEE.
- Zet in de setup de optie "HT-NR = KN-NR" op NEE.

32.10 Transactions.

It is possible to enforce the use of table numbers (PB-numbers) or allow the operator to enter orders without a PB-number. This is set in the set-up of the terminal. The order entry follows the normal procedures as on the terminal. Error corrections are possible using the cursor control keys, followed by the key correction. With-in the transaction the key functions as a correction key. Outside a transaction the key functions as a Refund key, in that case the display shows: NTSO (programmable option). Transactions are finalised using the total-key. In case of a PB-number transaction the data is processed as with the Open/Add/Service key on the Nitsuko, without PB-number the transaction is finalised as a Cash transaction on the Nitsuko. In case of PB-numbers, PB-number 98 cannot be used.

32.10.1 Override preset price.

Enter the price (without decimal) first, then the Price-key followed by the PLU-number key. This is a programmable option in the terminal.

32.10.2 PLU-look up.

Depending on the setting of the programmable option WGR it is possible to search for Plu's by department or search the complete file. The display shows the Plu-number and descriptor. Enter the Plu on the PLU-number key. If the option WGR is on, the display shows the departments, enter the department in which you need to search, and enter this number on the look-up key. The display will show all Plu's linked to that department. Enter the required Plu-number on the Plu-number key. With software version 8G in the handheld items can be located by alfanummeric search. Set the option TEXT SUCHEN to J to activate this feature. The lay-out of the alfa keys is fixed.

32.10.3 Modifiers.

Modifiers can be looked-up, press the Modifier key. Enter the required one on the Modifier key. Modifiers can only be entered after a Plu and the maximum number of modifiers per item is 4.

32.10.4 Split PB.

To split the items posted on a PB, start the transaction by entering a PB# on the Table-key. Then press the Menu key and set option 1. Now enter all items to be splitted, followed by the Total key. The system assumes Cash payment for all items splitted.

32.11 Setup

To enter into the setup, press the Menu key and then switch on the terminal. Then the setup screen appears. To program a certain feature move the cursor to the line, activate that feature by pressing the digit 1 key, de-activate by pressing the digit 0 key. Press the Total key to leave the setup mode.

TASTENBEEP	If Yes key beeps if No key beep is suppressed
FEHLERBEEP	If Yes error tone is on.
TISCH-ZWANG	If Yes the operator must enter a table number before the transaction can
start.	
RAM CLEAR	If Yes the complete memory is cleared, all options are set to No and all files
	need to be reloaded.
DATEN PACKEN	If Yes all "alike" items within the transaction are consolidated
LAND	0=German, 1=French, 2=Dutch, 3=Italian, 4=English, 5=Spanisch.
DEMOVERSION	If Yes data the terminal will not transmit data.
NSTO	If Yes the Correction key operates also as a refund key. In this case the
	transaction can start with the correction key. If set to no only corrections
	within the transactions are allowed.
REVIERZUWEISUNG	Feature not supported yet.
HT-NR = KN-NR	If Yes clerk number is equal to the handheld number.
VOLLE CHIPNR	Must be No.
SUMMEN-ANZEIGEN	If Yes the handheld will show the total amount of the current transaction
	when the operator presses the Total key. To transmit the order press the
	Total key again.
FREIER PLUPREIS	Clerk can override the preset price, using the Price key.
WGR SUCHEN	If Yes Plu's are looked-up by department otherwise Plu's are looked by
	sequential.
% RABBAT	Feature not supported yet.
2. VK-EBENE	Second price level active.
1.VK NACH PLU	Return to price level 1 after each item.
1.VK NACH TOTAL	Return to price level 1 after each transaction
CHEF-ESSEN	Feature not supported yet.
FREIE CAN-NR	Feature not supported yet.
CHIP-KREDIT	Feature not supported yet.
SHUBERTSYSTEM	Feature not supported yet.
STOP NACH TOTAL	Feature not supported yet.
SEP.M.RUECKRUF	Feature not supported yet.
WAEHRUNGSUMR.	Feature not supported yet.
ZALUNGS-ARI	Feature not supported yet.
BEILAGENZWANG	Feature not supported yet.
KELLNER-CODE	Feature not supported yet.
GASTANZAHL	Feature not supported yet.
STATIONSWAHL	Feature not supported yet.
KREDITZUBUCHUNG	Feature not supported yet.
	Feature not supported yet.
FREIE TASTATUR	Feature not supported yet.
	Feature not supported yet.
	Feature not supported yet.
KUNDEN_ADRESSE	Feature not supported yet.
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Note:

There must be no other handheld installation with the same frequency within 500 meters. The Internal Handheld number MUST be unique within 1 installation. Check this by entering 9999 on the MENU key which will show the number of the handheld.

33 Modem connection.

Modems require special consideration in terms of initialisation, it is mandatory to set the modem not to change the baud rate to the terminal while communicating. The maximum speed the Sensei can communicate via modem is 9600 baud. If the modem bit (option 1) is set in SystemParameter 108, the Sensei will initialise the modem after a power up, or when the watchdog timer has generated an interrupt. A watchdog timer is an internal timer which must be reset by the OS with-in a certain time. If the OS doesn't reset the timer with-in this period, then the watchdog timer will generate a warm reset, if the modem bit is set the OS will initialise the modem. The Sensei can initialise the modem connected in 2 ways:

- If options 1 and 2 in system parameter 108 are set the string to initialise the modem is taken from system message 90. This string cannot contain spaces! At power-up or when the watchdog timer is triggered the OS will put the modem in command mode and transfer the contents of System message 90 to the modem.
- ♦ If only option 1 in system parameter 108 is set, then the OS will at power-up or when the watchdog timer is triggered instruct the modem to re-load profile 0 as stored in the modem. For this option you need to program the modem first and store the parameters in the modem. Using a PC, create a batch file with the following commands then execute the batch command, this example assumes the modem is connected to com port 1 on the computer. The parameters are written in profile 0 of the modem.

ECHO Modem picks up after 3 rings MODE COM1:9600,N,8,1 ECHO AT&FS0=3>COM1: ECHO ATB0E0Q1&C0&D0&R1&K0\N0%%C0>COM1: ECHO AT&W0>COM1:

Then connect the modem to the Sensei.

To make this work correctly the following modem parameters should not be changed, because we use the default parameters to switch the modem to go into command mode. So there is no reason they are changed anyway: S12=50 S2=43 and S3=13. At the time of initialisation the message MODEM INIT is displayed, and when the initialisation is ok the message MODEM INIT OK is displayed. If the OS cannot initialise the modem correctly it signals an error condition.

As the Sensei follows the standard PC pin configuration for a DB-9 you can use the standard cable supplied with the modem to connect it to the Sensei.

34 Lan.

The maximum numbers of terminals interconnected via a hub is 64. Each terminal needs a unique sequential terminal number assigned between 1 and 64 To interconnect more than 2 terminals a hub must be used. In order for the network to function properly, each terminal must be initialised with the same database, the keyboard layout, printer assignment can be different for each terminal in the LAN. In each terminal, program the number of terminals on the LAN and the terminal number of each unit. Then power-up to initialise the LAN, a message is shown on the display. Then the network is active

34.1 HUB.

The hub must be a PC LAN compatible hub, 10Base-T Ethernet type. The record lay-out (TCP/IP) developed for the Sensei to exchange data between terminals is compatible with the standard PC LAN (Windows 95/98/NT), because of this compatibility one can connect a Sensei with-in a network of PC's. If the PC-lan is running at 100Mbits/sec. the hub must support 10Mbits/sec as well as 100Mbits/sec. These type of hubs are available on the market.

34.2 Cables & connectors.

The type of cable must be compatible with 22-26 A WG 8 wires although for 10Base-T only 4 are used, the maximum length is 100 meters, connector used is RJ-45.

Pin number	Signal
1	Tx+ (transmission)
2	Tx– (transmission)
3	RX+ (reception)
4	Not used
5	Not used
6	Rx- (reception)
7	Not used
8	Not used

Note: in the case of a LAN of only 2 terminals a hub is not required. The 2 terminals are then connected with a cross link cable.

34.3 Programming the LAN.

You need to set the number of terminals active in System parameter 78, and then for each terminal individually set a unique terminal number in System parameter 16. The terminal numbers should start with 1 and the maximum is 64.

34.4 Down loading files to an Individual register.

Files can be downloaded from any terminal to any other terminal. Enter the following command: YYXX where YY indicates the register number added with 50 and XX the file number. The downloading procedure starts with the DUMP –key, in the X, Z PGM or C position of the lock. The DUMP -key is part of the system keyboard.

Example: 6102 DUMP downloads the department file to register 11 (61 = 50 + 11). File numbers are the same as displayed in the programming window.

User programming mode 1] PLU 13] Keyboard 2] Department 14] Salesperson 3] Group 14] Salesperson 3] Group 15] Time zones 4] Modifier 16] Discount 5] Clerks 17] Condiment 6] Tax 7] Time & date

- 8] Foreign currency 9] Receipt trailer 10] Receipt header
- 11] Slip header 12] PB# text strings

System programming mode screen I

1]	PLU	13]	Keyboard
2]	Department	14]	Salesperson
3]	Group	15]	Time zones
4]	Modifier	16]	Discount
5]	Clerks	17]	Condiment
6]	Tax table	18]	System text
7]	Time & date	19]	Error message
8]	Foreign currency	20]	Day text
9]	Receipt trailer	21]	Month text
10]	Receipt header	22]	Tendering
11]	Slip header	23]	PO & RA
12]	PB# text string	24]	Corrections

System programming mode screen 2

- 25] Drawer text 26] PB# functions 27] Reports 28] System parameters
- 29] Hardware test

34.5 Down loading files to fixed number of registers.

Make sure the registers are numbered sequentially, use this command to download a file while operators are working on the registers. The command is YYXX where YY indicates the number of registers connected and XX is the file number Example: 601 DUMP will broadcast the PLU file to register 1 through 6.During file transfer, the register on which the transfer was initiated will show the register number addressed as well as the file record number in the display. " ZZ XXXXX" ZZ is the register number and XXXXX is the record number. When the register has executed the command it will print on the journal "PDUMP YYXX OKE #ZZ" in case there was no error and "PDUMP YYXX TIME OUT #ZZ" in case there was an error. This line is printed for every register it has been sent to. YYXX is the command entered and ZZ is the register number it has been sent to. In case a file is not active in the application, it will not be sent. Sales data are not cleared when you sent a file to another register.

When you are using RANDOM PLU numbers in the application the register will sent the UPDATE record to the other register in case you are dumping the PLU file with the command for individual or fixed number of registers (YY01). This means that in case a PLU is not present in the receiving register it will not be created!! Only when it is present it will be updated. There are three special commands:

- YY00 This command will sent automatically all active files to the addressed register YY.
- **YY98** This command will sent the CLEAR PLU FILE command to the addressed register YY in case Random Plu numbers are used in the application. Note the sales and inventory data are cleared in the addressed register!!
- YY99 this command will sent the complete PLU file to the addressed register, in case Random Plu numbers are active. You must consider two things using this command:

Before you execute this command you MUST execute the command 105 on the TYPE key otherwise the PLU's which are still in the UPDATE file are not sent!! Be sure the PLU file in the addressed register is cleared. This can be done on the receiving terminal (entering 108 on the TYPE key) or use the command YY98 to the transmitting register.

Note: When broadcasting system flags the flags related to the terminal number are not broadcast. This includes terminal numbers, baud rates e. for RS-232 ports and printer assignments.

34.6 Individual network report.

Network reports can be requested from any terminal with in the LAN. Enter the following command: YYXX \overrightarrow{RPT} where YY stands for the register number added with 50 and XX for the user report number. Example: 6101 will take report 1 from register 11 (61 = 50 + 11)

34.7 Consolidate network report.

Make sure the registers are numbered sequentially, use this command to take a report <u>while</u> <u>operators are working on the registers</u>. The command is YYXX <u>RPT</u> where YY indicates the number of registers connected and XX is the user report number. Example: 601 <u>RPT</u> will take report 1 from register 1 to 6.

Note: for system reports the entry is then as follows : YYXXXXX. YY <u>S-RPT</u> indicates the network code as described above and XXXXX is the system report number.

Note: Printing reports on a shared journal printer.

The system supports this feature with some limitations. Z-reports programmed to print on the receipt and journal can only be requested on a terminal to which the printer is connected. For X-reports this is not necessary, and is only printed on a receipt printer. In real life this is acceptable as reports either individual or consolidated are taken from a terminal that has the printer connected.

34.8 PB sharing.

The details posted to a PB are broadcast when they are registered and stored in the memory of each individual terminal. This guarantees maximum security, as each individual terminal has a copy of the bill. The Sensei is not based on a master/back-up master concept but a shared file concept.

As a hub is used the terminals are no longer capable to communicate with each other when the hub fails. Although this is a rare occasion a master/master concept offers a much higher level of security. In case of a master/back-up master concept the check details need to be requested each time a check is opened. When the hub fails, cable is cut or loose bills can only be processed from either the master or backup master, in our concept the bill is available from any terminal at any time.

When a faulty terminal has been repaired, it is necessary to restore the PB-files in this terminal. To copy the data from a terminal into the repaired one the procedure is simple and straight forward, for example to restore the PB-file in terminal 4 (repaired one) from terminal 2 (has the correct PB-file): enter 9902 TEST on terminal number 4.

34.9 Clerk interrupt.

The details of the transaction for each clerk is transferred to the terminal on which the clerk signs on. The ticket will travel across the LAN with the clerk.

34.10 Printer sharing.

Any printer can be shared among terminals, with this feature several terminals can use one receipt printer, this printer is then shared among these terminals. There are some limitations with the slip printers. Printing on a shared slip printer is different from a non-shared slip printer. With a non-shared slip printer, data is printed immediately. With a shared printer, data is sent to the printer when the slip is set COMPULSORY in the print layout of the function. When set compulsory the register will select the slip, and sent the data to the printer and assumes that the paper is already inserted. When not inserted the SLIP light on the PRINTER will start flashing and the printer will wait until the paper is inserted. Please note that in this case you MUST insert a paper because the printer will wait forever. **NOTE: with printer sharing the maximum terminals in the LAN is limited to 24**

34.11 Alternative remote printer selection.

Data for remote printers is send when the transaction is finalised. In case of a printer error the system will immediately signal an error condition and activate the programmed alternative remote printer. A message is displayed to indicate the re routing has been activated. This message is displayed for each transaction. This message makes it easier for the operator to locate the faulty printer.



The system is auto-healing meaning for each new transaction the system will first try the programmed routing, when the printer responds the system will automatically turn back to this printer. To indicate the default printer selection is active, a message will be displayed once.



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34.12 Network errors.

In case of network errors the operating system will signal these to the operator in the following format:

NETWORK ERROR !

R#XX P#YYXX indicates the terminal number which doesn't respond; YY indicates the type of error.

YY	Message
00	Cannot open a PB# on the addressed terminal
01	Cannot print on RS-232 port 1 on the addressed terminal
02	Cannot print on RS-232 port 2 on the addressed terminal
03	Cannot print on RS-232 port 3 on the addressed terminal
04	Cannot print on RS-232 port 4 on the addressed terminal
05	Cannot print on RS-232 port 5 on the addressed terminal
06	Cannot print on RS-232 port 6 on the addressed terminal
07	Cannot print on RS-232 port 3 on the addressed terminal
08	Cannot close a PB# on the addressed terminal
09	Cannot post an item to a PB# on the addressed terminal

When a terminal is switched off all others can no longer communicate with this terminal. In a system with floating PB#'s and 2 terminals numbered #1 and #2. When on terminal number 2 the waiter tries to open a PB#, the display will show:

NETWORK ERROR ! R#01 P#00

The error tone is off, and the operator can continue to register the items. The display will continue to show the message until the register is back on line. A faulty register doesn't stop the operation of other

35 System parameters.

Enter 28 on the **Type-key**. The system supports 150 flags with 8 options per flag, each flag activates or de-activates a certain option. The **OPT**-key toggles the status of each flag. Each line shows the value of the options activated in YYY

System	n pa	arameters								
Flag	1	(YYY)	1	2	3	4	5	6	7	8
Flag	2	(YYY)	1	2	3	4	5	6	7	8
Flag	3	(YYY)	1	2	3	4	5	6	7	8
Flag	4	(YYY)	1	2	3	4	5	6	7	8
Flag	5	(YYY)	1	2	3	4	5	6	7	8
Flag	6	(YYY)	1	2	3	4	5	6	7	8
Flag	7	(YYY)	1	2	3	4	5	6	7	8
Flag	8	(YYY)	1	2	3	4	5	6	7	8
Flag	9	(YYY)	1	2	3	4	5	6	7	8
Flag	10	(YYY)	1	2	3	4	5	6	7	8

Note: An * left from the option indicates that this option is active

			F	lag	num	ıber			
Parameter 1	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	Amount print 1,000
	Х	Х	Х	Х	Х	Х	1	Х	Amount print 1,000
	Х	Х	Х	Х	Х	1	Х	Х	Amount print 1.000,00
	Х	Х	Х	Х	1	Х	Х	Х	Amount print 1,000.00
	Х	Х	Х	1	Х	Х	Х	Х	Amount print 1.000,000
	Х	Х	1	Х	Х	Х	Х	Х	Amount print 1,000.000
	1	1	Х	Х	Х	Х	Х	Х	Amount print 1.000,0
	1	Х	Х	Х	Х	Х	Х	Х	Amount print 1,000

			F	lag	num	ıber			
Parameter 2	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	Х	Х	1	Suppress time on R/J
	Х	Х	Х	Х	Х	Х	1	Х	Suppress date on R/J
	Х	Х	Х	Х	Х	1	Х	Х	Suppress clerk print on R/J/Slip
	Х	Х	Х	Х	1	Х	Х	Х	Suppress location and terminal number on R/J/Slip
	Х	Х	Х	1	Х	Х	Х	Х	Suppress receipt# on R/J/Slip
	Х	Х	1	Х	Х	Х	Х	Х	Print time & date double height
	Х	1	Х	Х	Х	Х	Х	Х	Print receipt # double height
	1	Х	Х	Х	Х	Х	Х	Х	Print a point instead of a comma for the fraction

			F	lag	num	ıber			
Parameter 3	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	1	Х	Х	Print items on remote printer in the sequence they are entered
	Х	Х	Х	Х	1	Х	Х	Х	Reset salesperson to 1
	Х	Х	Х	1	Х	Х	Х	Х	Receipt trailer in double height
	Х	Х	1	Х	Х	Х	Х	Х	Receipt header in double height
	Х	1	Х	Х	Х	Х	Х	Х	Dutch rounding
	1	Х	Х	Х	Х	Х	Х	Х	AM/PM instead of 24 hour system

			F	lag	num	ber			
Parameter 4	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	1	Х	Х	Х	Х	Х	Х	YYYY MM DD
	1	Х	Х	Х	Х	Х	Х	Х	MM DD YYYY
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				K .	IS C)per	ating	system
Х	Х	Х	Х	Х	Х	Х	Х	DD MM YYYY

			F	lag	num	nber			
Parameter 5	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	Х	Х	1	Not allowed to select a different sales person inside the transaction
	Х	Х	Х	Х	Х	Х	1	Х	Sales person selection compulsory
	Х	Х	Х	Х	Х	1	Х	Х	Item discount & sub total discount combined in one key
	Х	Х	Х	Х	1	Х	Х	Х	Future use
	Х	Х	Х	1	Х	Х	Х	Х	Don't print report data and boot-up data on journal at power up
	Х	Х	1	Х	Х	Х	Х	Х	Suppress PLU# printed on PLU report
	Х	1	Х	Х	Х	Х	Х	Х	Future use
	1	Х	Х	Х	Х	Х	Х	Х	Disable key tone

			F	lag	num	nber			
Parameter 6	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	Х	Х	1	Skip zero totals on a PLU-report
	X	Х	X	X	X	Х	1	Х	Print the PLU report sorted according to the department link. The report starts with the PLU's linked to department number 1 etc.
	Х	Х	Х	Х	Х	1	Х	Х	Print number of items on the remote printer tickets
	Х	Х	Х	Х	1	Х	Х	Х	German magazine decoding
	Х	Х	Х	1	Х	Х	Х	Х	PO/RA don't add in the tendering key, used to finalise the PO/RA transaction.
	Х	Х	1	Х	Х	Х	Х	Х	If set the yearly total sales counter is never reset, you may use this as a NRGT
	X	1	X	X	X	Х	X	X	Unlimited copies of the receipt ticket. Each time the subttl key is pressed a copy of the ticket is printed.
	1	Х	Х	Х	Х	Х	Х	Х	Print number of items registered during the transaction on the receipt

			F	lag	num	nber		
Parameter 7	1	2	3	4	5	6	7	8
Value	1	2	4	8	16	32	64	128

			F	lag	num	ber		
Parameter 8	1	2	3	4	5	6	7	8
Value	1	2	4	8	16	32	64	128

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	Maximum number of lines that fit on a slip paper. If the maximum number of lines is reached the operator is prompted to enter a new page, and printing continues. A subttl amount is printed on each page and a page number,

			F	lag	num	ber		
Parameter 9	1	2	3	4	5	6	7	8
Value	1	2	4	8	16	32	64	128

			F	lag	num	ber			
Parameter 10	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	Х	Х	1	Future use
	Х	Х	Х	Х	Х	Х	1	Х	Training clerks are printed on the clerk report
	х	Х	Х	Х	Х	1	Х	Х	First 4 locations of the clerk name are a numeric password
	Х	Х	Х	Х	1	Х	Х	Х	Print the clerk number when a clerk is allowed to change inside the transaction
	X	X	X	1	Х	Х	Х	Х	Finalise a transaction when the clerk removes the key from the lock. In case of a PB# transaction the first record in the PB-file is activated, with all other transaction the first record in the tendering file.
	Х	Х	1	Х	Х	Х	Х	Х	Clerks cannot be changed inside a transaction
	Х	1	Х	Х	Х	Х	Х	Х	The clerk who starts the PB#, must also finalise (i.e. settle) that PB#
	1	Х	Х	Х	Х	Х	Х	Х	Compulsory clerk selection

			F	lag	num	ıber			
Parameter 11	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
									First ascii character prefix for Amt in the local
									currency

			F	lag	num	nber			
Parameter 12	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
									Second ascii character prefix for Amt in the local
									currency

			F	lag	num	ıber			
Parameter 13	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	Drive through system if on
	Х	Х	Х	Х	Х	Х	1	Х	Future use
	Х	Х	Х	Х	Х	1	Х	Х	Future use
	Х	Х	Х	Х	1	Х	Х	Х	Future use
	Х	Х	Х	1	Х	Х	Х	Х	Don't print PLU price on a PLU report
	Ma	x nu	imbe	er of	Х	Х	Х	Х	
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	Х	Х	Х	Х									
	Х	Х	Х	Х									

			F	lag	num	ıber		
Parameter 14	1	2	3	4	5	6	7	8
Value	1	2	4	8	16	32	64	128

			F	lag	num	ber				
Parameter 15	1	2 3 4 5 6 7 8								
Value	1	2	4	8	16	32	64	128		

			F	lag	num	ber			
Parameter 16	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
									Register number printed on tickets and slip. This number is also used for the register number or the LAN. This must be a sequential number between 1 and 64. Set to 0 if the LAN is not active.

			F	lag	num	ıber			
Parameter 17	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	1	Х	Х	Х	Х	Х	Х	When the subttl key is pressed, the copy receip
									is printed on slip printer
	1	Х	Х	Х	Х	Х	Х	Х	When the subttl key is pressed, the copy receipt
									is printed on receipt and journal printer

			F	lag	num	ber			
Parameter 18	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	Х	Х	1	
	Х	Х	Х	Х	Х	Х	1	Х	
X X X X X 1 X X									
	Х	Х	Х	Х	1	Х	Х	Х	
	Х	Х	Х	1	Х	Х	Х	Х	
	Х	Х	1	Х	Х	Х	Х	Х	
	Х	1	Х	Х	Х	Х	Х	Х	
	1	Х	Х	Х	Х	Х	Х	Х	

1 0 time calculation in hours

1 1 time calculation in days

when active the time at which the PB# was opened is stored for each PB#. When the check is printed the elapsed time is calculated, and multiplied by the same PLU# as the PB#.

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Х	Х	Х	Х	1	Х	Х	Х	If set receipt numbers don't increment with a PB					
Х	Х	Х	1	Х	Х	Х	Х	Fast check out if set, otherwise you will need to					
								program a checks paid function to be able to settle a guest check					
Х	Х	1	Х	Х	Х	Х	Х	Check number system instead of pre- programmed PB-numbers.					
Х	1	Х	Х	Х	Х	Х	Х	If set display PB amount, otherwise PB number					
1	Х	Х	Х	Х	Х	Х	Х	Compulsory PB# selection					

			F	lag	num	ıber			
Parameter 20	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	Х	Х	1	System generates check numbers
	Х	Х	Х	Х	Х	Х	1	Х	Future use
	Х	Х	Х	Х	Х	1	Х	Х	Send PB# details to computer with a PB report
	Х	Х	Х	Х	1	Х	Х	Х	Decode from a barcode an account number. The
									barcode must start with 99.
	Х	Х	Х	1	Х	Х	Х	Х	Don't print items on the bill with a zero amount
	Х	Х	1	Х	Х	Х	Х	Х	Print new balance each time
	Х	1	Х	Х	Х	Х	Х	Х	Use of bill compulsory after the bill has been
									printed
	1	Х	Х	Х	Х	Х	Х	Х	Reprint bill only in MG-position

			F	lag	num	nber]
Parameter 21	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
									Computer port number

			F	lag	num	ber]
Parameter 22	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	Х	Х	1	Future use
	Х	Х	Х	Х	Х	Х	1	Х	Future use
	Х	Х	Х	Х	Х	1	Х	Х	Future use
	Х	Х	Х	Х	1	Х	Х	Х	Future use
	Х	Х	Х	1	Х	Х	Х	Х	Future use
	Х	Х	1	Х	Х	Х	Х	Х	Future use
	Х	1	Х	Х	Х	Х	Х	Х	Future use
	1	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	num	ber			
Parameter 23	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	Х	Х	1	
	Х	Х	Х	Х	Х	Х	1	Х	
	Х	Х	Х	Х	Х	1	Х	Х	
	Х	Х	Х	Х	1	Х	Х	Х	
	Х	Х	Х	1	Х	Х	Х	Х	
	Х	Х	1	Х	Х	Х	Х	Х	
	Х	1	Х	Х	Х	Х	Х	Х	
	1	Х	Х	Х	Х	Х	Х	Х	

			F	lag	num	iber			
Parameter 24	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	Х	Х	1	Future use
	Х	Х	Х	Х	Х	Х	1	Х	Print PLU inventory in quantity on plu report
	Х	Х	Х	Х	Х	1	Х	Х	Article level key works on departments
	Х	Х	Х	Х	1	Х	Х	Х	Article level on PLU# key
	Х	Х	Х	1	Х	Х	Х	Х	Instore marking. Format 21RRRRRAAAAAC
									RRRRR article number (random)
									AAAAA amount
									C check digit
	Х	Х	1	Х	Х	Х	Х	Х	Future use
	Х	1	Х	Х	Х	Х	Х	Х	Article shift returns to level 0 after the transaction
	1	Х	Х	Х	Х	Х	Х	Х	Article shift returns to level 0 unless the article is
									repeated

			F	lag	num	ıber			
Parameter 25	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	Х	Х	1	Compulsory to use the multiply key to register
									multiple units on a preset PLU key.
	Х	Х	Х	Х	Х	Х	1	Х	Future use
	Х	Х	Х	Х	Х	1	Х	Х	Future use
	Х	Х	Х	Х	1	Х	Х	Х	Future use
	Х	Х	Х	1	Х	Х	Х	Х	Future use
Note: if non of	Х	Х	1	Х	Х	Х	Х	Х	Print department name the PLU is linked to
these bits, print	Х	1	Х	Х	Х	Х	Х	Х	Print PLU descriptor
PLU descriptor	1	Х	Х	Х	Х	Х	Х	Х	Print PLU#

			F	lag	num	nber			
Parameter 26	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	Х	Х	1	Future use
	Х	Х	Х	Х	Х	Х	1	Х	Print and calculate foreign currency 2
	Х	Х	Х	Х	Х	1	Х	Х	Print and calculate foreign currency 1
	Х	Х	Х	Х	1	Х	Х	х	Use a modifier text string starting with a % character to recall a random plu from the file. This to program preset random numbers.
	Х	Х	Х	1	Х	Х	Х	Х	Future use
	Х	Х	1	Х	Х	Х	Х	Х	Future use
	Х	1	Х	Х	Х	Х	Х	Х	Future use
	1	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	num	nber]
Parameter 27	1	2	3	4	5	6	7	8	
	Wo	ord s	ize		Ba	udra	te		Settings RS-232 port 1

Bau	rate	Word & Parity and stop bits
0 =	1.200	1 = 8 data, no parity, 1 stop
1 =	2.400	2 = 8 data, no parity, 2 stop
2 =	4.800	3 = 8 data, even parity, 1 stop
3 =	9.600	4 = 8 data, even parity, 2 stop
4 =	19.200	5 = 8 data, odd parity, 1 stop
5 =	38.400	6 = 8 data, odd parity, 2 stop

7 = 7 data, no parity, 1 stop 8 = 7 data, no parity, 2 stop 9 = 7 data, even parity, 1 stop 10 = 7 data, even parity, 2 stop 11 = 7 data, odd parity, 1 stop 12 = 7 data, odd parity, 2 stop

12 = 7 data, odd parity, 2 stop

			F	lag	num	nber			
Parameter 28	1	2	3	4	5	6	7	8	
	Wo	ord s	ize		Ba	udra	te		Settings RS-232 port 2

			F	lag	num	nber			
Parameter 29	1	2	3	4	5	6	7	8	
	Wo	ord s	ize		Ba	udra	te		Settings RS-232 port 3

			F	lag	num	ıber		
Parameter 30	1	2	3	4	5	6	7	8
Value	1	2	4	8	16	32	64	128
	Х	Х	Х	Х	Х	Х	Х	1

			F	lag	num	ıber	,		
Parameter 31	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
	Х	Х	Х	Х	Х	Х	Х	1	Future use
	Х	Х	Х	Х	Х	Х	1	Х	Future use
	Х	Х	Х	Х	Х	1	Х	Х	Scanner doesn't feature RTS/CTS
	Х	Х	Х	Х	1	Х	Х	Х	French magazine decoding
	Х	Х	Х	1	Х	Х	Х	Х	Scanner doesn't transmit a prefix
				Х	Х	Х	Х	Х	Scanner connected to port 1 through 7.

			F	lag					
Parameter 32	1	2	3	4	8				
									Slip printer type

			F	lag	nun	ıber]
Parameter 33	1	2	3	4	5	6	7	8	
									Port to which the slip printer is connected

			F	lag	num	ber		
Parameter 34	1	2	3	4	5	6	7	8
Value	1	2	4	8	16	32	64	128
	Х	Х	Х	Х	Х	Х	Х	1
	Х	Х	Х	Х	Х	Х	1	Х
	Х	Х	Х	Х	Х	1	Х	Х
	Х	Х	Х	Х	1	Х	Х	Х
	Ch	arac	ter	set	Х	Х	Х	Х
	for		Ep	son	Х	Х	Х	Х
	prir	nters	3.		Х	Х	Х	Х
					Х	Х	Х	Х

			F	lag	num	nber			
Parameter 35	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-1	Х	Х	Х	Х	Х	Х	Х	1	Single ticket but consolidate same items
	Х	Х	Х	Х	Х	Х	1	Х	Single ticket for every item if OFF even for the same items
	Х	Х	Х	Х	Х	1	Х	Х	Print the total amount for the printed item, with system message 59
	Х	Х	Х	Х	1	Х	Х	Х	Print a line in between items
					Х	Х	Х	Х	
					Х	Х	Х	Х	

		Flag number													
Parameter 36	1	2	3	4	5	6	7	8							
Value	1	2	4	1	2	4	8	16							
KP-1	Po	rt #		Те	rmir	al n	umb	er	RS-23						
									24) this						
									is 0 for						

ſ

RS-232 port (max 7) on terminal number (max 24) this printer is connected to. Terminal number is 0 for this terminal.

			F	lag	num	ıber			
Parameter 37	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-1	Х	Х	Х	Х	Х	Х	Х	1	Print characters NOT in double height
	Х	Х	Х	Х	Х	Х	1	Х	
	Х	Х	Х	Х	Х	1	Х	Х	
	Х	Х	Х	Х	1	Х	Х	Х	
	Alt	erna	tive	KΡ	Х	Х	Х	Х	
	sel	selection			Х	Х	Х	Х	
					Х	Х	Х	Х	
					Х	Х	Х	Х	If 0 no alternative KP is selected

			F	lag	num	ıber			
Parameter 38	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-2	Х	Х	Х	Х	Х	Х	Х	1	Single ticket but consolidate same items
	Х	Х	Х	Х	Х	Х	1	Х	Single ticket for every item if OFF even for the same items
	Х	Х	Х	Х	Х	1	Х	Х	Print the total amount for the printed item, with system message 59
	Х	Х	Х	Х	1	Х	Х	Х	Print a line in between items
					Х	Х	Х	Х	
					Х	Х	Х	Х	
					Х	Х	Х	Х	

	Flag number											
Parameter 39	1	2	3	4	5	6	7	8				
Value	1	2	4	1	2	4	8	16				

			F	lag	num	ıber			
Parameter 40	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-3	Х	Х	Х	Х	Х	Х	Х	1	Print characters NOT in double height
	Х	Х	Х	Х	Х	Х	1	Х	
	Х	Х	Х	Х	Х	1	Х	Х	
	Х	Х	Х	Х	1	Х	Х	Х	
	Alte	erna	tive	KP	Х	Х	Х	Х	
	sel	ectio	วท		Х	Х	Х	Х	
					Х	Х	Х	Х	
					Х	Х	Х	Х	If 0 no alternative KP is selected

			F	Flag	num	nber			
Parameter 41	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-3	Х	Х	Х	Х	Х	Х	Х	1	Single ticket but consolidate same items
	Х	Х	Х	Х	Х	Х	1	Х	Single ticket for every item if OFF even for the
									same items
	Х	Х	Х	Х	Х	1	Х	Х	Print the total amount for the printed item, with
									system message 59
	Х	Х	Х	Х	1	Х	Х	Х	Print a line in between items
					Х	Х	Х	Х	
					Х	Х	Х	Х	
					Х	Х	Х	Х	

Flag num									
Parameter 42	1	2	3	4	5	6	7	8	
Value	1	2	4	1	2	4	8	16	
KP-3	Po	rt #		Те	rmin	al nı	umb	er	RS-232 port (max 7) on terminal number (24) this printer is connected to. Terminal num is 0 for this terminal.

			F	lag	num	ber			
Parameter 43	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-3	Х	Х	Х	Х	Х	Х	Х	1	Print characters NOT in double height
	Х	Х	Х	Х	Х	Х	1	Х	
	Х	Х	Х	Х	Х	1	Х	Х	
	Х	Х	Х	Х	1	Х	Х	Х	
	Alte	erna	tive	KΡ	Х	Х	Х	Х	
	sel	ectio	on		Х	Х	Х	Х	
					Х	Х	Х	Х	
					Х	Х	Х	Х	If 0 no alternative KP is selected

			F	lag	num	ıber			
Parameter 44	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-4	Х	Х	Х	Х	Х	Х	Х	1	Single ticket but consolidate same items

Х	Х	Х	Х	Х	Х	1	Х	Single ticket for every item if OFF even for the same items			
Х	Х	Х	Х	Х	1	Х	Х	Print the total amount for the printed item, with system message 59			
Х	Х	Х	Х	1	Х	Х	Х	Print a line in between items			
				Х	Х	Х	Х				
				Х	Х	Х	Х				
I				Х	Х	Х	Х				

			F	lag	num				
Parameter 45	1	2	3	4	5	6	7	8	
Value	1	2	4	1	2	4	8	16	
KP-4	Po	rt #		Те	rmin	al nı	umb	er	RS-232 port (max 7) on terminal number (24) this printer is connected to. Terminal nur is 0 for this terminal.

			F	lag	num	nber			
Parameter 46	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-4	Х	Х	Х	Х	Х	Х	Х	1	Print characters NOT in double height
	Х	Х	Х	Х	Х	Х	1	Х	
	Х	Х	Х	Х	Х	1	Х	Х	
	Х	Х	Х	Х	1	Х	Х	Х	
	Alt	erna	tive	KP	Х	Х	Х	Х	
	sel	ectio	on		Х	Х	Х	Х	
					Х	Х	Х	Х	
					Х	Х	Х	Х	If 0 no alternative KP is selected

			F	lag	num	ıber			
Parameter 47	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-5	Х	Х	Х	Х	Х	Х	Х	1	Single ticket but consolidate same items
	Х	Х	Х	Х	Х	Х	1	Х	Single ticket for every item if OFF even for the same items
	Х	Х	Х	Х	Х	1	Х	Х	Print the total amount for the printed item, with system message 59
	Х	Х	Х	Х	1	Х	Х	Х	Print a line in between items
					Х	Х	Х	Х	
					Х	Х	Х	Х	
					Х	Х	Х	Х	

			F	lag	nun	ıber	•	
Parameter 48	1	2	3	4	5	6	7	8
Value	1	2	4	1	2	4	8	16
KP-5	Po	rt #		Те	rmin	al ni	umb	er

	-				-				5 - J
			F	lag	num	ıber			
Parameter 49	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-5	Х	Х	Х	Х	Х	Х	Х	1	Print characters NOT in double height
	Х	Х	Х	Х	Х	Х	1	Х	
	Х	Х	Х	Х	Х	1	Х	Х	
	Х	Х	Х	Х	1	Х	Х	Х	
	Alte	erna	tive	KΡ	Х	Х	Х	Х	
	sel	ectic	on		Х	Х	Х	Х	
					Х	Х	Х	Х	
					Х	Х	Х	Х	If 0 no alternative KP is selected

			F	lag	num	nber			
Parameter 50	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-6	Х	Х	Х	Х	Х	Х	Х	1	Single ticket but consolidate same items
	Х	Х	Х	Х	Х	Х	1	Х	Single ticket for every item if OFF even for the same items
	Х	Х	X	X	Х	1	Х	Х	Print the total amount for the printed item, with system message 59
	Х	Х	Х	Х	1	Х	Х	Х	Print a line in between items
					Х	Х	Х	Х	
					Х	Х	Х	Х	
					Х	Х	Х	Х	

			F	lag	num	nber	•			
Parameter 51	1	2	3	4	5	6	7	8		
Value	1	2	4	1	2	4	8	16		
KP-6	Po	rt #		Те	erminal number					

			F	lag	num	ıber			
Parameter 52	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-6	Х	Х	Х	Х	Х	Х	Х	1	Print characters NOT in double height
	Х	Х	Х	Х	Х	Х	1	Х	
	Х	Х	Х	Х	Х	1	Х	Х	
	Х	Х	Х	Х	1	Х	Х	Х	
	Alte	erna	tive	KΡ	Х	Х	Х	Х	
	sel	ectio	on		Х	Х	Х	Х	
					Х	Х	Х	Х	
					Х	Х	Х	Х	If 0 no alternative KP is selected

			F	lag	num	nber			
Parameter 53	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-7	Х	Х	Х	Х	Х	Х	Х	1	Single ticket but consolidate same items
	Х	Х	Х	Х	Х	Х	1	Х	Single ticket for every item if OFF even for the same items
	Х	Х	Х	Х	Х	1	Х	Х	Print the total amount for the printed item, with system message 59
	Х	Х	Х	Х	1	Х	Х	Х	Print a line in between items

	-			
Х	Х	Х	Х	
Х	Х	Х	Х	
Х	Х	Х	Х	

			F	lag	num	ıber	,		
Parameter 54	1	2	3	4	5	6	7	8	
Value	1	2	4	1	2	4	8	16	
KP-7	Po	rt #		Те	min	al nu	<u>imb</u>	er	RS-232 port (max 7) on terminal number (max 24) this printer is connected to. Terminal number is 0 for this terminal.

			F	lag	num	ıber			
Parameter 55	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-7	Х	Х	Х	Х	Х	Х	Х	1	Print characters NOT in double height
	Х	Х	Х	Х	Х	Х	1	Х	
	Х	Х	Х	Х	Х	1	Х	Х	
	Х	Х	Х	Х	1	Х	Х	Х	
	Alte	erna	tive	KΡ	Х	Х	Х	Х	
	sel	ectio	on		Х	Х	Х	Х	
					Х	Х	Х	Х	
					Х	Х	Х	Х	If 0 no alternative KP is selected

			F	lag	num	nber			
Parameter 56	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	
KP-8	Х	Х	Х	Х	Х	Х	Х	1	Single ticket but consolidate same items
	Х	Х	Х	Х	Х	Х	1	Х	Single ticket for every item if OFF even for the same items
	Х	Х	Х	Х	Х	1	Х	Х	Print the total amount for the printed item, with system message 59
	Х	Х	Х	Х	1	Х	Х	Х	Print a line in between items
					Х	Х	Х	Х	
					Х	Х	Х	Х	
					Х	Х	Х	Х	

Flag number										
Parameter 57	1	2	3	4	5	6	7	8		
Value	1	2	4	1	2	4	8	16		
KP-8	Po	rt #		Те	Ferminal number					

			F	lag	num	ıber			
Parameter 58	1	2	3	4	5	6	7	8	
Value	1	2	4	8	16	32	64	128	Print characters NOT in double height
KP-8	Х	Х	Х	Х	Х	Х	Х	1	
	Х	Х	Х	Х	Х	Х	1	Х	
	Х	Х	Х	Х	Х	1	Х	Х	

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			F	lag	num	ıber			
Parameter 59	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	1	Print only the last 2 digits of the receipt number on remote printer.
	Х	Х	Х	Х	Х	Х	1	Х	Print PB text on receipt and remote printer
	Х	Х	Х	Х	Х	1	Х	Х	Enter modifier before PLU, PLU must be single ticket
	Х	Х	Х	Х	1	Х	Х	Х	Reduced length receipt header with normal transactions and full length with print bill
	Х	Х	Х	1	Х	Х	Х	Х	Print PLU# on remote printer
	Х	Х	1	Х	Х	Х	Х	Х	Print price on KP (requires also flag 59-1)
	Х	1	Х	Х	Х	Х	Х	Х	Alternative remote print format (requires also flag 59-1
	1	Х	Х	Х	Х	Х	Х	Х	Print amount on remote printer

			F	lag	nun	nber			
Parameter 60	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	1	Future use
	Х	Х	Х	Х	Х	Х	1	Х	Future use
	Х	Х	Х	Х	Х	1	Х	Х	Future use
	Х	Х	Х	Х	1	Х	Х	Х	Future use
	Х	Х	Х	1	Х	Х	Х	Х	Future use
	Х	Х	1	Х	Х	Х	Х	Х	Future use
	Х	1	Х	Х	Х	Х	Х	Х	Future use
	1	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	num	nber]
Parameter 61	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	num	nber			
Parameter 62	1	2	3	4	8				
	Х	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	nun	nber]
Parameter 63	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	nun	nber			
Parameter 64	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	1	Dutch rounding on sales amount
	Х	Х	Х	Х	Х	Х	1	Х	Norwegian rounding on total amount only
	Х	Х	Х	Х	Х	1	Х	Х	Danish rounding on total amount only
	Х	Х	Х	Х	1	Х	Х	Х	French rounding on multiplication, tax and percentage discount
	Х	Х	Х	1	Х	Х	Х	Х	French rounding on total amount only
	Х	Х	1	Х	Х	Х	Х	Х	Swiss rounding on multiplication, tax and percentage discount
	Х	1	Х	Х	Х	Х	Х	Х	Swiss rounding on total amount only
	1	Х	Х	Х	Х	Х	Х	Х	Input masking

			_						1
-			- F	lag	nun	iber	·		-
Parameter 65	1	2	3	4	5	6	7	8	
									Receipt printer type
			F	lad	nun	nber			
Parameter 66	1	2	3	4	5	6	7	8	
	ŀ	-	-	-	•	•	-	Ť	RS-232 port for receipt printer
				loa		hor			1
D				lag	nun	ned	-		4
Parameter 67	1	2	3	4	5	0	1	ð	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use
						-			1
1			F	lag	nun	ber	'		
Parameter 68	1	2	3	4	5	6	7	8	
									Journal printer type
			F	lag	nun	ıber	•		
Parameter 69	1	2	3	4	5	6	7	8	
			-		-	-		-	RS-232 port for journal printer
			I	I	I	I	1		
			F	lan	nun	hor	,	1	
Parameter 70	1	2	2		5	6	7	8	-
Falallielei 70		2 V	5	4 V	J	V		0 V	Futuro upo
	^	^	^	^	^	^	^	^	Future use
				loa		hor			1
Demonster 74		•	Г Г	lag	nun	ned	-	•	-
Parameter 71	1	2	3	4	5	0	1	ð	Line days fourt
									Header font
						-			1
r		-	F	lag	nun	ber	'		
Parameter 72	1	2	3	4	5	6	7	8	
									Trailer font
									_
			F	lag	nun	ıber	,		
Parameter 73	1	2	3	4	5	6	7	8	
									Functions font
			F	lag	nun	ber	,		
Parameter 74	1	2	3	4	5	6	7	8	
	'	2	5	-	J	U	1	U	Article font
						I			Article Iont
			F	122	n	bo-	,		1
Doromotor 75		2	<u>г</u>	ay		iber	7	0	4
Parameter /5	1	2	3	4	Э	D	1	Ø	Information fant
									information font

Parameter 76			F	lag	nun	nber	•		
	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	1	Future use
	Х	Х	Х	Х	Х	Х	1	Х	Future use
	Х	Х	Х	Х	Х	1	Х	Х	Future use
	Х	Х	Х	Х	1	Х	Х	Х	Print unit price on the same line as the
				-	-				descriptor. Also flags 1 & 2 of this parameter
									must be set

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Х	Х	Х	1	Х	Х	Х	Х	Increment receipt number with each receipt
								issued and not at the start of the transaction
Х	Х	1	Х	Х	Х	Х	Х	Don't print the report on the journal
Х	1	Х	Х	Х	Х	Х	Х	Quantity on the same line as the item
1	Х	Х	Х	Х	Х	Х	Х	Don't print multiply details

Parameter 77	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use

Parameter 78	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	num	nber]
Parameter 79	1	2	3	4	5	6	7	8	
									Number of terminals connected on the LAN, maximum is 64

			F	lag					
Parameter 80	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	num	nber			
Parameter 81	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	num	nber			
Parameter 82	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	nun	ıber	•		
Parameter 83	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	1	Future use
	Х	Х	Х	Х	Х	Х	1	Х	Future use
	Х	Х	Х	Х	Х	1	Х	Х	Future use
	Х	Х	Х	Х	1	Х	Х	Х	Future use
	Х	Х	Х	1	Х	Х	Х	Х	Future use
	Х	Х	1	Х	Х	Х	Х	Х	Auto Copy PB bill
	Х	1	Х	Х	Х	Х	Х	Х	Set the quantity counter for this item to 0,5 when
									a price shift 2 is activated.
	1	Х	Х	Х	Х	Х	Х	Х	Future use

Paramotor 94 1 2 2 4 5 6 7 9
X X X X X X X X X Future use

Parameter 85	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	num	nber]
Parameter 86	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use
									-
---------------	-------	-------	-------	-----	-----	------	-----	-----	---
		-	F	lag	nun	nbei			
Parameter 87	1	2	3	4	5	6	7	8	
									which will fire the drawer.
			F	lag	nun	nbei	•]
Parameter 88	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use
			F	lag	nun	nbei	•		Г
Parameter 89	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use
			F	lag	nun	nhei	•		Г
Parameter 90	1	2	3	4	5	6	7	8	-
	X	X	X	Х	X	X	Х	X	RS-232 port used with the handheld
			F	nel	nun	ho	•		г
Parameter 91	1	2	3	4	5	6	7	8	-
	X	X	X	X	X	X	X	X	Future use
			•	·				•	
D (00			F	lag	nun	nbei		-	_
Parameter 92	1	2	3	4	5	6	7	8	
	×	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Future use
			F	lag	nun	nbei	•		7
Parameter 93	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	1	Future use
	Х	Х	Х	Х	Х	Х	1	Х	With the drawer report include the programmed decimal point position
	Х	Х	Х	Х	Х	1	Х	Х	Standard yearly total sales is used as a non reset grand total counter.
	Х	Х	Х	Х	1	Х	Х	Х	Print a subtotal ticket on journal with floating clerks
	Х	Х	Х	1	Х	Х	Х	X	Print a subtotal ticket on receipt with floating clerks
	Х	Х	1	Х	Х	Х	Х	Х	KP tickets are printed sorted by department
	X	1	X	Х	Х	X	Х	X	Internal use only
	1	Х	X	Х	Х	Х	Х	Х	Window stay down on PLU & Modifier screens
			F	lag	nun	nbei	r]
Parameter 94	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Port number for swipe card reader.
			F	lao	nun	nbei	•		Т
Parameter 95	1	2	3	4	5	6	7	8	
									Third ascii character prefix for Amt in the local currency
			F	lan	nun	nber	•		1
Parameter 96	1	2	3	4	5	6	7	8	1
	W	ord s	size	1	Ba	udra	ate	1 -	Settings RS-232 port 4 for programming refer to Systemparameter 27.
			F	lao	nun	nbei	•		
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Parameter 97	1	2	3	4	5	6	7	8	
	Wo	ord s	size		Ва	udra	te		Settings RS-232 port 5 for programming refer to Systemparameter 27.

			F	lag	nun	nber	'		
Parameter 98	1	1 2 3 4 5					7	8	
	Wo	ord s	ize		Ва	udra	ite		Settings RS-232 port 6 for programming refer to Systemparameter 27

			F	lag	num	nber]
Parameter 99	1 2 3 4 5 6 7 8								
	Wo	ord s	ize		Ba	udra	te		Settings RS-232 port 7 for programming refer to
									Systemparameter 27.

			F	lag	num	nber			
Parameter 100	1	2	3	4	5	6	7	8	
	Х	1	Х	Х	Х	Х	Х	Х	Do not re-route remote printers
	1	Х	Х	Х	Х	Х	Х	Х	The receipt header is also printed on the journal

			F	lag	num	nber			
Parameter 101	1	2	3	4	5	6	7	8	
	Х	Х	1	Х	Х	Х	Х	Х	for tables bigger than 100, Plu PriceLevel is shifted by 1
	Х	1	Х	Х	Х	Х	Х	Х	Future use
	1	Х	Х	Х	Х	Х	Х	Х	Print/Display tax status after each item

			F	lag	num	ıber			
Parameter 102	1	2	3	4	5	6	7	8	
	Х	Х	1	Х	Х	Х	Х	Х	Mobba scale (Portugal)
	Х	1	Х	Х	Х	Х	Х	Х	Ipesa scale (Portugal)
	1	Х	Х	Х	Х	Х	Х	Х	Epelsa scale (Spain)

			F	lag	num	ıber			
Parameter 103	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	num	nber			
Parameter 104	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	num	nber]
Parameter 105	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	Х	Х	Future use

			F	lag	nun	ıber	,		
Parameter 106	1	2	3	4	5	6	7	8	
	Х	Х	Х	Х	Х	Х	1	Х	New PbInvoice number. 1000 numbers reserved, beside Amt stored also number of table or "direct sales" message if used.
	Х	Х	Х	Х	Х	1	Х	Х	Plu print option decide if Plu should be printed or not rather than Pb print options.
	Х	Х	Х	Х	1	Х	Х	Х	Receipt number is printed in bold characters at the end of the header of the receipt, with special caption 54
	Х	Х	Х	1	Х	Х	Х	Х	Modifier 1 printed after plu which tax is shifted
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Х	Х	1	Х	Х	Х	Х	Х	Multiply the price with 100 for barcode tickets,
								printed by the scale.
Х	1	Х	Х	Х	Х	Х	Х	Activate Danish character set for display
1	Х	Х	Х	Х	Х	Х	Х	Fixed decimal point.

			F	lag	nun	nber	,		
Parameter 107	1	2	3	4	5	6	7	8	
8	Х	Х	Х	1	Х	Х	Х	Х	Print Direct Sales Invoice on Slip
	Х	Х	1	Х	Х	Х	Х	Х	Future use
2	Х	1	Х	Х	Х	Х	Х	Х	Print Direct Sales Invoice on Receipt
1	1	Х	Х	Х	Х	Х	Х	Х	Print Direct Sales Invoice on Journal
	Flag number						•		
Parameter 108	1	2	3	4	5	6	7	8	
	Х	1	Х	Х	Х	Х	Х	Х	Send commands as programmed in system message 90 to the modem (set also flag 1)
	1	Х	Х	Х	Х	Х	Х	Х	Modem connected to the Sensei, same port as is used for computer connection

	Flag number]
Parameter 109	1	2	3	4	5	6	7	8	
									Future use

			F	lag	num	ber]
Parameter 110	1	2	3	4	5	6	7	8	
									Future use

31 Type of remote printers.

Model	Туре	Remarks
Not active	0	
Epson TM-300	1	
Epson TM-60	2	
Epson TM-80	3	
Citizen IDP3541F	4	
Future use	5	
Citizen CBM-262	6	
Epson TM-H5000	7	
Samsung SRP-100	8	Compatible with Epson TM-300, with different drawer open command
Epson TM-375	9	Select type 7 for slip printer.
Axiohm APOS	10	Requires ROM version 1.2 in the printer. Otherwise select TM-80.
Axiohm 7156	11	Select type 8 for slip printer
Epson TM-U950	12	Only DS2-6 must be on Select type 9 for slip printer
CitizenCBM 230/231	13	
Citizen IDP3210	14	Set to 44 columns
Samsung SRP-300	15	Compatible with Epson TM-80 cannot print the logo, unless the correct eprom (version 1.14) is installed in the printer.

32 Rounding.

The OS supports the following kinds of rounding:

32.1 Swiss rounding.

Swiss rounding, last digit on amounts either 0 1 or 2 rounded down to 0. Digits 3 4 5 6 or 7 rounded down to 5. Digits 8 and 9 rounded up.

32.2 French rounding.

French rounding, last digit on amounts 1 2 3 4 5 rounded to 5. Digits 6 7 8 9 rounded to 10.

32.3 Danish rounding.

Danish rounding, last 2 digits 00 to 12 rounded down to 00, 13 to 37 rounded down to 25, 38 to 62 rounded to 50, digits 63 to 87 rounded to 75 and 88 to 99 rounded to 100.

32.4 Norwegian rounding.

Norwegian rounding is done on the last two digits. 00 to 24 rounded to 00, 25 to 74 rounded to 50 and last two digits 75 to 99 rounded to 100

32.5 Dutch rounding.

Is done on the last digit. 1 -- 4 round down to 00 last digit 5 -- 9 round-up.

32.6 Always round-up.

Total amount is always rounded-up if the last digit is not 0

33 Input masking.

If active the last digit (amounts only) entered must either be 0 or 5. Any other will result in errormessage#1 "INVALID ENTRY"

34 Keyboard functions.

All keys programmed with the last 2 digits as 00 can be used as a look-up key. For example an entry on a key programmed as 900 (tendering function), will select that record with-in the tendering file. This might be useful to recall tendering functions not used very frequently, to enter an amount press the X key first and then the record number required. To recall records press the key without entry. This will display all records in the file. For example 900 will list all programmed tendering functions. This procedure works on all functions in the same way. Except on a department the amount is entered on the "NEW PLU PRICE"- key (2010) multiply function is used to multiply quantity. A PLU#-

key is programmed as 10000, to enter quantities use the multiply function, followed by the PLU# to be recalled press the PLU#.

34.1 Digits.

These keys are not programmable via the keyboard.

34.2 Modifier group list

These keys list a predefined number of modifiers.

34.3 Condiment group list

These keys list a predefined number of condiments.

34.4 Decimal point key.

This key is used to enter decimal quantities. Keycode 0046

34.5 Correction functions.

The type of correction is programmed in the correction file. Paragraph:27, page: 39 discusses the various options. **Keycode 0300**

34.6 Foreign currency function.

Refer to paragraph 10 page 25 for the various options. Keycode 0400

34.7 Discount function.

Paragraph 22, page: 32discusses the various options. Keycode 0500

34.8 Read in Drawer totalizer.

This key will report the data as stored in the registers memory for the record number as programmed in the function **Keycode 0600**

34.9 No sale key.

This key will open the drawer. To count the number of times the no sale function was used you need to program a read drawer totalizer key.

34.10 PB-number key.

This key will select a function from the PB-file. Paragraph 29, page:42 discusses the various options. **Keycode 0700**

34.11 PO & RA number key.

This key will select a paid-out or received on account function. Paragraph 26, page:38 discusses the various options. **Keycode 0800**

34.12 Tendering number key.

This key will select a tendering function. Paragraph 0, page: 0 discusses the various options.Pre-set tender Pre-set tender keys enable easy entry of predefined amounts on the Cash key. The operating system will consider the amount on the first record in the Tender file. This should be the Cash key. The preset amounts are programmable. **Keycode 0900**

34.13 Modifier number key.

This key will select a modifier. Paragraph 19, page: 19 discusses the various options. Keycode 1000

34.14 Plu price shift level 1.

This key will select the next sales price of the item. It will print the same descriptor, link to the same department adds into the same report counters, inventory (if active) as level 0 of the item. This key precedes either a preset plu-key of the PLU# key. If a price level is not programmed but referred to, it will result in an invalid entry error message. **Keycode 2011**

34.15 Plu price shift level 2.

As level 1 selects the second price-level within the PLU-structure. Keycode 2012

34.16 Plu price shift level 3.

As level 1 only the third price-level within the PLU-structure. Keycode 2013

34.17 Plu price shift level 4.

As level 1 only the fourth price-level within the PLU-structure. Keycode 2014

34.18 Condiment level 1.

This key will select price level 1 of a condiment plu, the price stored in price level 1 is added to the amount of the main plu. Paragraph 34,page 34discusses the condiment functions available.

34.19 Condiment level 2.

This key will select price level 1 of a condiment plu, the price stored in price level 1 is subtracted from the amount of the main plu.

34.20 PLU article shift level 1.

This key precedes either a preset plu-key or the PLU# key. It will add 1 to the number referred to by the preset-key, or entered on the PLU#-key. As a result it will select the next entry in the file, and will use all programming for that PLU#. The system features to keep the same descriptor for each article level but maintain report counters per article shift level. **Keycode 2021**

34.21 PLU article shift level 2.

As level 1 but adds 2. Keycode 2022

34.22 PLU article shift level 3. As level 1 but add 3. **Keycode 2023**

34.23 PLU article shift level 4.

As level 1 but adds 4. Keycode 2014

Note: The display indicates the active article shift or price shift. The OS supports a descriptor for each shift level that can be printed. If the shift function is used to select $\frac{1}{2}$ (for example half pint, half a loaf of bread etc) set SystemFlag 83 value to 2. This will then select a different price and register a quantity of 0,5.

34.24 List key.

Keycode 2030 this key will list all items linked to the department number entered on this key.

34.25 Number print.

This key prints the entered number on Receipt/Journal and if a slip printer is connected also on the slip. If activated in combination with PB#, the entered number is stored. **Keycode 2034**

34.26 Permanent tax shift.

This key can only be activated at the start of the transaction and will shift tax status 1 to tax 2 and tax 3 to tax 4. Note that when CLEAR is pressed after the tax shift key is activated the inversion is disabled. Once the transaction is started the tax-status remains active until the transaction is finalised. **Keycode 2035**

34.27 Temporary tax shift.

This key will shift the tax status 1 to tax 2 and tax 3 to tax 4 but only for 1 registration within the transaction. The original tax status is restored even when the same item is repeated. **Keycode 2036.**

Note: The key stored the tax itemizers addressed. This will override the tax selection as set in the PLU-file. Modifier 1 will automatically be printed (also on remote printers) if Systemparameter 106 (value 8 option 4) is set. This to indicate a TAKE-OUT item to the preparation area.

34.28 Clerk number key.

A number must be entered on this key. Paragraph, 20 page:20 discusses the various options for the Version 0.5 March 29, 2001 Page: 78

clerks. A secret clerk number can be set, refer to paragraph 8.10 page: 21. Keycode 3000

34.29 PLU preset key.

The open PLU-key is **Keycode 10000** to program a preset plu key **keycode is 10XXXX.** XXXX is the record number in the PLU-file. To program preset keys with random numbers program these keys as a preset modifier key. The text for this modifier starts with a % character followed by the random plu number. Set option 5 SystemParameter 26 (value 16) to activate this option. Then a modifier text programmed as %123456789 will recall from the random plu file the plu with a random number of 123456789 when the key with this modifier is pushed.

34.30 Clear key.

his key will clear your last input or will clear the error tone after an incorrect entry. Keycode 2000

34.31 RPF.

This key will feed the receipt paper 1 line. Keycode 2001

34.32 JPF.

This key will feed the receipt paper 1 line. **Keycode 2002**

34.33 Receipt On/Off.

This key will suspend printing on the receipt printer. All data programmed to print on the receipt will be suspended. To activate printing, press the key again. The key cannot be used with-in a transaction. The COPY receipt function will print on the receipt regardless of the status of the receipt on/off flag. If a report is programmed to print on the receipt, it will print on the receipt regardless of the status of the receipt on/off flag. There is an indicator on the operator display (RON) to show the status of the receipt on/off flag. **Keycode 2003**

34.34 Multiply.

Key to multiply entries the OS supports multiplication for with X length X height with decimal entries. **Keycode 2004**

34.35 Subtotal.

Will display the total amount. In case of ADD-ON tax the amount displayed is the amount included tax. In case of a split tendering the amount still to be settled is displayed. **Keycode 2005**

34.36 Number entry.

Number entry to enter credit card number etc. Can only be used within a transaction. Keycode 2006

34.37 Per forma Invoice.

Use this key before other PB#-functions are selected. When active items registered are not stored in the tracking buffer, nor are report count updated. This function can be used to make a copy of the bill with a corrected method of payment. For instance when the customer decides to pay with credit card instead of cash. In this case the operator can re-enter the items for that bill through the keyboard and then finalise with the correct finalising key. **Keycode 2008**

34.38 New Price.

This key is used to override the plu price, and to enter an amount on a department when the Departnumber# key is used to select the department. **Keycode 2010**

34.39 Issue Receipt.

This key will issue the current receipt. The finalising function is not printed and the PB# is printed in the trailer of the receipt with a PB#-transaction. **Keycode 2032**

34.40 Check validation type 1.

To validate checks via the slip printer. Amount and date together with line 1 and 6 of the receipt header are printed. Characters are rotated 90 degrees. Use this function to print shop details as name address together with date and amount on the check. **Keycode 2049**

34.41 Check validation type 2.

This function operates like a "normal" ECR validation function. It prints only the first 4 characters of the 6th line of the receipt header with the machine number. **Keycode 2048**

34.42 Suspend/Recall.

This key suspends the current transaction to start a new one. Press the key again to recall the suspended transaction. System message 28 is printed on the receipt. **Keycode 2080**

34.43 New folio.

This key resets the line feed counter. Activate the key before you open the PB#. on the check the header with the current balance is printed. **Keycode 2081**

34.44 PLU-enquiry.

This key will display the PLU-details, but doesn't record the PLU#. This function is used to check the price of an item. Press this key first, enter the PLU# and press the PLU#-key or scan the barcode. **Keycode 2084**

34.45 Price level#.

This key functions as an "open" price level key. The number entered selects the price level, if the level is active in the application. **Keycode 2082**

34.46 Article level#.

This key functions as an "open" article level key. The number entered selects the article level, if the level is active in the application. **Keycode 2083**

35 Peripherals.

Via the available RS-232 ports the following peripherals will be supported:

Barcode scanners. Scanners must support hardware handshaking so connect the RTS and CTS. The OS supports 9600 baud, 8 bits, 1 stop and no parity. Strings received from the scanner are terminated by a CR only. No pre-amble or post-amble is required. So most scanners can be connected, as they are programmable. Ports 1 2 and 3 supply power which can be used to power the scanner. As there are so many different scanners it is difficult to specify a cable, but as the Sensei ports 1 and 2 are compatible with the DB-9 on a PC and as most scanners are set to communicate with PC's it should be no problem. In case you encounter problems contact us, we will be happy to help you. A generic cable lay-out could be:

Port 1~2	Scanner	Port 3	Scanner
9 VCC 🔶	→ to VCC of the scanner	1 VCC 🗲	→ to VCC of the scanner
2 RXD 🗲	→ TXD	4 RXD 🗲	→ TXD
7 RTS 🗲	→ CTS	2 DSR 🗲	→ CTS
8 CTS 🔶	→ RTS	8 DTR 🗲	→ RTS
6 DSR 🔶		7 SG 🛛 🗲	—▶ SG
5 SG 🔶	→ SG		

- □ **Magnetic card-reader.** KIS will specify the card-reader that is supported. KIS will not supply the card-reader, but we will inform about the suppliers address details.
- Printers. All printers compatible with the ESC/POS command structure will be supported. Printers can be shared among terminals. A standard PC-compatible printer can be used to print guest checks. This will require a serial to parallel converter.

Sensei ports 1 & 2 Printer DB-25 3 TXD 2 RXD 3 RXD 2 RXD 4 2 TXD 6 DSR 8 CTS 5 GND 7 GND Sensei ports 3~7 Printer DB-25 3 TXD 4 RXD 2 DSR 2 DSR 2 DSR 2 DSR 4 DTR 6 DSR 7 GND 7 GND

- Pole display. The pole displays currently supported for the Nitsuko will be supported for the Sensei as well.
- **EFT.** As we have linked the Nitsuko to many EFT-terminals, we will incorporate the same routines in the Sensei.
- Modem/PC. The system supports modem communication. Modems require special consideration in terms of initialisation, it is mandatory to set the modem not to change the baud rate to the terminal while communicating. The maximum speed the Sensei can communicate via modem is 9600 baud. The command string for the modem (connected to the computer) is AT&F0\N0&W0 This will load the default factory profile number 0 (&F0), select normal buffered speed mode (\N0) and writes the settings to profile 0. To program the modem connected with the Sensei, create the following bat-file on your computer, then connect the modem to the COM port and execute the bat-file. Then connect the modem to the RS-232 port of the Sensei:

ECHO Init Batch File for modem type v90 on cash register side ECHO Modem picks up after 10 rings MODE COM1:9600,N,8,1 ECHO AT&FS0=3>COM1: ECHO ATB0E0Q1&C0&D0&R1&K0\N0%%C0>COM1: ECHO AT&W0>COM1:

Sensei ports 1 & 2 PC DB-9 1 DCD 1 DCD 2 RXD 3 TXD 3 TXD 2 RXD 5 GND 5 GND 6 DSR 4 DTR

/RIS -	- 8 CIS
8 CTS 🗲	🔶 7 RTS
9 Vcc	

K.I.S Operating system To connect the modem to the Sensei, use the standard cable supplied with the modem. As the pin configuration for ports 1 & 2 follow the standard PC (9-pin) configuration this will work ok. Note that pin 9 on port 1 & 2 supplies 9 volts. This pin on the modem normally signals ringing indicator, the Sensei doesn't need this signal.