

Technical Documentation

TransL2 / TransArc / TransLPe

Access Codes for data transfer between scale and PC

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About Using the Access Codes:

Access Codes sometimes contain digits that are only intended for use with L2 scales and not MIRA scales. In this document, such digits are highlighted in grey, and marked, "only for L2." To use these codes with MIRA scales, simply replace these digits with zeros (other characters entered will simply be ignored).

Contents

Page

I	About TransL2 / TransArc / TransLPe	5
II	Data Structure of Access Codes in TransL2 / TransArc	7
III	Overview - Scale Types, Applications and Applicable Access Codes	11
III-A	Access Codes for Data Entry ⇒ Codes 2XX.....	11
III-B	Access Codes for Individual Sales ⇒ Codes 4XX.....	13
III-C	Access Codes for Reports ⇒ Codes 5XX	14
III-D	Access Codes for the TAF Journal ⇒ Codes 8XX	15
IV	Access Code Functional Groups	17
IV-A	Configuring and Checking a Scale Network	17
	Access Code: 5 Function: Request Network Status	17
	Access Code: 6 Function: Request Cash Register Status	18
IV-B	Data Entry - Access Codes 2XX.....	19
	Access Code: 200 Function: Network Map.....	19
	Access Code: 201 Function: Scale Configuration	22
	Access Code: 202 Function: User Configuration.....	23
	Access Code: 203 Function: Store Name Text	25
	Access Code: 204 Function: Operator Register	26
	Access Code: 205 Function: Roving Operator Group	27
	Access Code: 206 Function: Department Data	28
	Access Code: 207 Function: Article Data	29
	Access Code: 208 Function: Article Data – 1 st Supplement for Labels	31
	Access Code: 209 Function: Article Data – 2 nd Supplement for Labels.....	33
	Access Code: 210 Function: Article Group Data	34
	Access Code: 211 Function: Receipt Text - Header and Footer	35
	Access Code: 212 Function: Store Name Text for Labels.....	36
	Access Code: 213 Function: Running Text	37
	Access Code: 214 Function: EAN Codes (not including EAN128).....	38
	Access Code: 215 Function: Tare Memory	39
	Access Code: 216 Function: Fixed Keys	40
	Access Code: 217 Function: Pictograph Keys, for Self-Serve Applications	41
	Access Code: 218 Function: VAT	42
	Access Code: 219 Function: Date Text	43
	Access Code: 220 Function: Advertising Text.....	44
	Access Code: 221 Function: Mark-ups / Discounts.....	45
	Access Code: 222 Function: Sales Categories - for Reports	46
	Access Code: 223 Function: Special Offers - Part 1 ⇒ Parameters	47
	Access Code: 224 Function: Special Offers - Part 2 ⇒ Assigning Articles.....	48
	Access Code: 225 Function: Time-Governed Price Changes - Part 1 ⇒ Parameters	49
	Access Code: 226 Function: Time-Governed Price Changes - Part 2 ⇒ Assigning Articles.....	50
	Access Code: 227 Function: Main Department Data.....	51
	Access Code: 228 Function: Main Article Group Data	52
	Access Code: 229 Function: Product Text Data.....	53
	Access Code: 230 Function: Label Types L2 (also see Access Code 242)	54
	Access Code: 231 Function: Payment Methods – Non EU Currencies.....	57
	Access Code: 233 Function: Keyboard Configuration – for non Cash Register Applications.....	58
	Access Code: 235 Function: Scales - Lock / Unlock	60
	Access Code: 236 Function: Deletion of Article Based Sales – Without Deletion Date	61

Access Code: 237 Function: Configurable Report	62
Access Code: 238 Function: Date / Time	63
Access Code: 239 Function: Configuration of COM1 / COM2	64
Access Code: 242 Function: Label Separation and Separation Tolerance	65
Access Code: 243 Function: Standard Label Definition for Service-Counter, Self-Serve and Pre-Pack 1	66
Access Code: 244 Function: Initiating a Software Download	68
Access Code: 245 Function: Sleep Mode – Enable / Disable	69
Access Code: 246 Function: User Configuration – Supplement for Cash Register Applications	70
Access Code: 248 Function: Keyboard Config. - for L2 with Cash Register Appl.	71
Access Code: 249 Function: Cash Register Takings – for Cash Register Applicat.	73
Access Code: 250 Function: Receipt Printing – Enable-/Disable	74
Access Code: 251 Function: Lock-/Unlock Scale - Cash Register Application	75
Access Code: 252 Function: Deletion of Cash Register Sales - Without Deletion Date	76
Access Code: 253 Function: Additional Article Number	77
Access Code: 255 Function: Deletion of Orders, Checkout-Slips and Collection-Slips	78
Access Code: 256 Function: Receipt Text - Checkout-Slips / Collection-Slips	79
Access Code: 260 Function: Label Types	80
Access Code: 261 Function: Keyboard Configuration - Cash Register Application	83
Access Code: 262 Function: Enabling and Disabling Mark-ups / Discounts / Discounts	85
Access Code: 266 Function: Scale Circuit Selection (only for Infoline LK05...)	86
Access Code: 267 Function: EAN Codes	87
Access Code: 269 Function: Direct Text Number	88
Access Code: 270 Function: Direct Text Table (Line by Line)	89
Access Code: 271 Function: Accounts (Account Number)	90
Access Code: 272 Function: Accounts - Sales Levels	91
Access Code: 273 Function: Deleting Sales Data in an Account	92
Access Code: 274 Function: Euro Configuration	93
Access Code: 275 Function: Load Printer Logo	95
Access Code: 276 Function: Payment Methods – EU Currencies	96
Access Code: 277 Function: User Configuration – MIRA Specific	98
Access Code: 278 Function: Order Data	99
Access Code: 279 Function: Scale Configuration – MIRA Specific	100
Access Code: 280 Function: Delivery Note Customer Data	101
Access Code: 283 Function: Configuration of E-Cash Card Reader	102
Access Code: 285 Function: Keyboard configuration LP (additional direct-text-keys)	103
Access Code: 287 Function: Shortcode Data	104
Access Code: 288 Function: Shortcode Assignment for a PLU	105
Access Code: 289 Function: Shortcode sales datas	106
IV-C Individual Sales - Access Codes 4XX	107
Access Code: 400 Function: Store Sales	108
Access Code: 401 Function: Department Sales	109
Access Code: 402 Function: Default Department Sales	110
Access Code: 403 Function: Scale Sales	111
Access Code: 404 Function: Operator Sales	112
Access Code: 405 Function: Time Based Sales	113
Access Code: 406 Function: Article Group Sales	114
Access Code: 407 Function: Main Article Group Sales	115
Access Code: 408 Function: Article Sales	116
Access Code: 409 Function: Mark-up / Discount Sales	117
Access Code: 410 Function: Sales Category Sales	118
Access Code: 411 Function: VAT Sales	119
Access Code: 412 Function: Special Offer Sales	120
IV-D Sales Reports - Access Codes 5XX	121
Access Code: 500 Function: Operator & Scale Complete	122
Access Code: 501 Function: Main Department	126
Access Code: 502 Function: Department	128
Access Code: 503 Function: Main Article Groups	130
Access Code: 504 Function: Article Groups	132
Access Code: 505 Function: Article	134
Access Code: 506 Function: Best Selling Articles	136
Access Code: 507 Function: Worst Selling Articles	138
Access Code: 508 Function: Special Offer	140
Access Code: 509 Function: Article Price Changes	142

Access Code: 510 Function: Sales – Time Based	143
Access Code: 511 Function: Summary Journal.....	145
Access Code: 512 Function: Detailed Journal.....	146
Access Code: 517 Function: Grand Total (Cash register).....	152
Access Code: 518 Function: Cash Register Takings	153
Access Codes: 519 and 520 Function: Cash Register Totalling / Report.....	154
Access Code: 521; 522; 523 Function: Orders / Checkout-Slips / Collection-Slips.....	156
Access Code: 524 Function: Operator Time Keeping	157
Access Code: 530 Function: Sales Report - Accounts	158
Access Code: 532 Function: Orders - MIRA Cash Register.....	160
Access Code: 533 Function: Delivery Note Data - MIRA Cash Register.....	161
Access Code: 596 Function: Deletion of Cash Register Sales – With Deletion Date.....	166
Access Code: 598 Function: Deletion of Article Based Sales – With Deletion Date	167
Access Code: 616 Function: Delete Customer Data - Cash register	168
IV-E Accessing the TAF Journal - Access Codes 8XX	169
Access Code: 800 Function: Bookings, Single Entry Receipts, Blank Receipts.....	170
Access Code: 801 Function: Receipt Totals.....	171
Access Code: 802 Function: Payment Methods.....	172
Access Code: 803 Function: Change Returned	173
Access Code: 804 Function: VAT.....	174
Access Code: 805 Function: Article Discounts	175
Access Code: 806 Function: Total Discounts	176
Access Code: 807 Function: Price Changes	177
Access Code: 808 Function: Operator Timekeeping.....	178
Access Code: 809 Function: Resetting Receipt Numbers and Deleting the TAF.....	179
Access Code: 810 Function: List Free Space in TAF Memory	180
Access Code: 811 Function: Customer Number	181
Access Code: 812 Function: Checkout-Slips and Collection-Slips.....	182
Access Code: 813 Function: Receipt Cancellation / Deletion.....	183
Access Code: 816 Function: Booking-additionals Receipt-Repetition.....	184
Access Code: 817 Function: Delivery Note Bookings - MIRA Cash Register	186
Access Code: 821 Function: Supplementary Info: E-Cash for MIRA, Cash Register	187
Access Code: 822 Function: Shortcode	188
V Revision History.....	189
VI Appendix - Setup Parameters, Log files and Error Messages	193
TransL2 (16-Bit) Setup Parameters	193
Status Line for TransL2 (16-Bit) / Parameter -wxx.....	194
TransL2 (32-Bit) Setup Parameters	195
Setup Parameters for TransArc (only for .exe and not for .dll)	198
Configuration of TransLPe Using SETUP.EXE.....	199
Direct Command Functions for TransArc and TransLPe DLLs	201
LOG FILE Entries	202
Error Codes.....	203
Glossary of Terms and Concepts	205

I About TransL2 / TransArc / TransLPe

General

The TransL2 (16 and 32-bit versions), TransArc and TransLPe programs provide connectivity between a PC and a scale network, comprising of L2 scales and / or MIRA scales and / or an Infoline unit. It's therefore possible to read data from the scale network into the PC (e.g. for Network Status, Cash Register Status, Sales information, Reports and Journals) and to send data from the PC into the scale network - scale data entered or edited in a PC can be saved on scales making up the network (Data Entry).

This document describes the Access Codes necessary for this exchange of data to take place. An Access Code normally consists of a command part (i.e. command sent from the PC to the scale network) and a response part (i.e. a response from the scale network to the PC).

The use and syntax of these codes is identical for the TransL2, TransArc and TransLPe programs.

Since a modem usually requires a serial interface, data transmission using a modem can only be accomplished with TransL2 (i.e. TransArc and TransLPe do not use serial interfaces).

TransL2

Before using TransL2 (16 or 32-Bit Version), please ensure that a serial cable is connected between the COM1 or COM2 port of the PC and channel A or channel B (B only applies to L2 scales) of one scale making up the scale network (see the L2-Service manual, folder 2, register 5, point 2). The following files should be available on the PC's hard drive:

- TL2.EXE ⇒ Self extracting packed file containing the executable files mentioned below
- TRANSL2.EXE ⇒ TransL2 communication program
- TRANSL2.CFG ⇒ Configuration file for TransL2, automatically created

The TL2.EXE program contains all TransL2 components in packed form. Before unpacking, you are advised to copy TL2.EXE into its own specific directory (e.g. <c:\transl2\>). To unpack the above-mentioned files, simply run TL2.EXE. The TRANSL2.CFG file is automatically created after the initial running of TRANSL2.EXE. It contains the configuration data (see Appendix for optional settings). Run TRANSL2.EXE to start the TransL2 program:

E.g. ⇒ Terminal Mode / Enter Access Code directly

```
C:\TRANSL2>transl2
```

The cursor should now be flashing at the beginning of the next line. TransL2 is now active and is ready for use. The PC connected can now be used to communicate with the scale network. The desired Access Code number can be entered and confirmed with the Return key (this constitutes a command). Depending on the Access Code used, it can take a few seconds to receive a response (i.e. a numeric response code) from the scale network. To end the program, Type <Ctrl Z> (a ^Z should be echoed onto the screen).

E.g. ⇒ File Mode - Access Codes are saved in a file

```
C:\TRANSL2>transl2-i<<inputfile>>-o<<outputfile>>
```

In this mode, Access Code(s) are entered into an ASCII file. The name of this file is then entered as <<inputfile>>. The response of the scale(s) is saved in the ASCII file <<outputfile>>.

About TransArc

Unlike TransL2, to be able to use TransArc, a special TransArc card has to be installed into the host PC. This card enables the PC to be directly integrated into the ArcNet scale network. This results in a significantly improved data transfer rate in comparison to TransL2.

The delivery content, installation and use of TransArc is fully described in "Maintenance Manual, TransArc / TransArc 32 Communications program (ME-22000763). The manual can be found in the L2-Servicemanual/folder 2/Register 8.

About TransLPe

The TransLPe (TRETNET.EXE) program is used to exchange data between MIRAE scales (Mira-Ethernet) and a PC. Communication takes place using the TCP/IP protocol, via a network card built into the PC. More information on TransLPe can be found in the appendix.

II Data Structure of Access Codes in TransL2 / TransArc

ASCII-Header - Structure

Byte	Description	Valid range	Meaning
0	CMD/RSP	0..3	CMD RSP ⇒ Command ⇒ Response
1	ID [identification]	00001..99999	Access Code
2			
3			
4			
5			
6	CTL [Control]	0..F	Status ⇒ Response status of (only in RSP)
7		0..F	Data server ⇒ Additional parameters (CMD/RSP)
8		0..F	Key ⇒ Offset for index field (only in CMD)
9		0..F	Access ⇒ Access to particular records (CMD/RSP)
A	DPT [department]	0000..9999	Department number
B			
C			
D			
E	DEV [device]	00..99	Scale number
F			

ASCII-Header - Meaning

CMD/RSP: X 0 = single command
 1 = single response
 2 = don't care
 3 = multiple response

ID: X X X X X Access Code number

CTL: X X X X Control
 For CTL, bytes 6 (status), 7 (additional parameters), 8 (key field) and 9 (access to particular records) are used. In contrast to byte 6, bytes 7, 8, and 9 sometimes have different meanings in different functional blocks of Access Codes (i.e. the blocks code 2XX, code 4XX, code 5XX, code 8XX). This is described on the first pages of each respective chapter.

X _ _ _ Byte 6 - Status (only with RSP)
 The first position of CTL (Byte 6, Status) is set with all responses (RSP) from the scale network. It reveals information relating to the status of a response. The meanings of values that the status byte can assume are the same for all functional blocks of Access Codes.
 A status byte has no meaning in commands (CMD).

A Status Byte can assume the following values:

Status	Meaning	Description
0 _ _ _	All OK	
1 _ _ _	file not created	
2 _ _ _	no free record	
3 _ _ _	file corrupt	
4 _ _ _	not found	(record not found)
5 _ _ _	wrong key	
6 _ _ _	double key	(several records exist with the same key)
C _ _ _	(12) bad parameter	(bad parameter input)
D _ _ _	(13) general error	
E _ _ _	(14) undefined command	
F _ _ _	(15) not executable	

_ X _ _ Byte 7 - Data Server / additional parameters
 These parameters have different meanings for different functional groups of Access Codes.

In Access Codes 2XX:

CMD 2: Data Server check Data Record
Check if records in the scales are identical or not.
RSP 2: Data equal ⇒ Records are identical
F: Data not equal ⇒ Records are not identical

In Access Codes 4XX. and 5XX

Sales Level	Sales Type
0: Sales Level 1	0: Service Counter Sales (i.e. cash register sales)
1: Sales Level 2	4: Self-Serve Sales (i.e. cash register sales)
2: Sales Level 3 (only for L2)	8: Pre-pack Sales
3: Sales Level 4 (only for L2)	C: Inventory Value

To combine a Sales Level with a Sales Type, the Sales Level should be added to the Sales Type. E.g. 6 corresponds to a Self-Serve Sale at Sales Level 3, and B (hex value for decimal 11) corresponds to a Pre-pack Sales at Sales Level 4.

In Access Code 8...byte 7 contains a don't care value

__X_

Byte 8 - key / Offset for index fields (only for CMDs)

The setting of this byte in individual Access Codes determines how the searching through lists is performed. E.g. in Access Code 207, the EAN number (secondary index 1) can be used as the index field instead of the PLU number (primary index). For an EAN number, or an article number, respective offset values must be used.

For Access Codes 2XX. and 4XX:

0: Primary key first field after the scale number
1: Secondary key 1 second field after the scale number
2: Secondary key 2 third field after the scale number
3: Secondary key 3 fourth field after the scale number

Additionally, for Access Codes 2XX

8: Indication of department and scale numbers / help functions for error tracing

To be used by Access Codes, not normally containing department and scale numbers in their responses (RSP). By using "8" in a command, the response will contain the department number and scale number from the record that was just read.

In Access Codes 5XX

4: Only for PLU / article group with sales (Access Codes 504, 505)
8: Only for Special Offer PLUs (Access Code 505)

In Access Codes 8XX, byte 8 contains a don't care value.

___X

Byte 9 - Access to particular records

When entering an Access Code, the access byte should be set to one of the following values, depending on whether the writing to, reading from, or deletion – of records is desired.

In Access Code 2XX

Access Type	Meaning
___0	write write to a record
___1	delete delete a record
___2	read equal read from the specified record
___3	read greater or equal read from the specified record the next one
___4	read less or equal read from the specified record the prev. one
___5	read greater read the next record
___6	read less read the previous record
___7	read all read all records
___8	delete all delete all records

In Access Codes 4XX

Access Type	Meaning	Description
___ 2	read equal	read the specified record
___ 3	read greater or equal	read the specified record or the next one
___ 5	read greater	read the next record

In Access Code 5XX

Access Type	Meaning	Description
___ 6	write to Channel	write to the interface

In Access Code 8...

Access Type	Meaning	Description
___ 2	read equal	read the specified record
___ 3	read greater or equal	read the specified record or the next one
___ 4	read less or equal	read the specified record or the previous one
___ 5	read greater	read the next record
___ 6	read less	read the previous record

DPT: X X X X

Department Number:

Most data is saved separately for each department, so department numbers must be specified (the exception is for example Access Code 204, where department number "0000" is given).

DEV: X X

Scale Number:

Can (according to Access Code) be used in accordance with the department number, when the scale data is to be addressed (for all scales of a department -> specify scale number "00").

Command & Response Structures – An Explanation of the Various Field Types and their Attributes

N = numerical value, C = character, F = flags, [#] = array Type

Every Access Code contains two structures:

- ⇒ one for commands
- ⇒ one for responses

The input command structure is used to send commands to the scale network. This enables records to be sent to, modified or read from scales in the network.

The response structure enables responses to be communicated back to the PC for every command sent.

Records are closed with CR/LF (Carriage Return / Line Feed).

If a record contains flag bytes, they should be read in the following way:

Every position of a flag-byte (Type F) contains a hexadecimal word (0-F) and thus represents in the binary system a value of 4 bits (e.g. Fh=1111b, 6h=0110b). A 4 position flag, which is represented by 4 ASCII characters, contains 16 Bits, with the most significant valued flag at the leftmost position (i.e. a binary value made up of 16 bits would be represented by 4 ASCII bytes with hexadecimal values as follows:

Flag	X	X	X	X
Bit-No.	15 14 13 12	11 10 09 08	07 06 05 04	03 02 01 00

Each flag can assume a hexadecimal value from 0-F

E.g.: Flag value	8	E	2	A
Bit value	1 0 0 0	1 1 1 0	0 0 1 0	1 0 1 0
Bit number	15 14 13 12	11 10 09 08	07 06 05 04	03 02 01 00

RMS (Received Message error Status)

For inactive scales within a network, additional information must be shown at the end of a response e.g. [2|15][4| 2].

These error messages are shown additionally in the response, when records have been modified or created (Access Codes 2XX) or when selective sales reports have been requested (Access Codes 4XX).

The below example shows two scales that have generated an error message during a status report:

Scale 2 Error 15 (F000h) ⇒ not executable (could not be shut down)
Scale 4 Error 2 (2000h) ⇒ no record available

Special Inputs for Linefeed (LF) and char size (Character Size)

Some text labelled with SG (where SG is the German abbreviation for Font Size) allows the font size at the beginning of each line to be specified. In this case, the first character should be char(5) (control character) and then a value from "1-F" (i.e. 1-9 and A-F) should be used for the font size.

For text consisting of several lines, `char(210)` can be used to enter a line-feed (LF).

Example

1 ⇒ Read all Article Group records from Department 1
(Access Code 210)

```
00021000070001000001
+-----+
|         |         |         | +----- DATA key-#, begin with Article Group no. 1 ...
|         |         |         | +----- DEV all scales in the department
|         |         |         | +----- DPT Department 1
|         |         | +----- CTL read all (7)
|         | +----- ID Access Code 210 (Article Group)
+----- CMD individual command
```

2 ⇨ Insert or modify Article Group 5 in Department 1 in “scales”, and allocate it to Main Article Group 2 (Access Code 210)

```
00021000000001000005scales                                0002
+---++---++---++++-+------ 20 -----++--|
|                                     |
|                                     | DATA Main Article Group no. -+
|                                     | +-
|                                     | DATA Article Group description
|                                     | +-----
|                                     | DATA key-#, Article Group no. 5
|                                     | +-----
|                                     | DEV Scale independent
|                                     | DPT Department 1
|                                     | +-----
|                                     | CTL create/modify(0)
|                                     | ID Access Code 210 (Article Group)
+-----+ CMD individual command
```

III Overview - Scale Types, Applications and Applicable Access Codes

III-A Access Codes for Data Entry ⇒ Codes 2XX

Access Code Usage for: 2 ⇒ TransL2 / a ⇒ TransArc / e ⇒ TransLPe

Codes	L2				MIRA ⇒ 1 Flash-EPROM			MIRA ⇒ 2 Flash-EPROM's				MIRA ⇒ 1 Flash-EPROM		
					Networked			Networked				stand alone		
	Appl. 7 Service counter/SS	Appl. 5 Cash register	Appl. 3 Pre-Pack 2	Appl. 27 Pre-Pack 2,Trac.	Appl. 1 Service counter	Appl. 2 Service counter/SS	Appl. 4 LP-f1	Appl. 5 Service counter/SS	Appl. 3 Cash register	Appl. 25 f2 Serv. counter/SS	Appl. 23 f2 Cash register	Appl. 60 Service counter	Appl. 61 Service counter/SS	Appl. 70 LP-f1
ArcNet	LL07	LL05	LL03	LL27	LM01	LM02	LM04	LM05 LF05	LM03 LF03	LM25 LF25	LM23 LF23	LM60	LM61	LM70
Ethernet								LE05	LE03	LE25	LE23			
5	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e			
6	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e			
200	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e			
201	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e			
202	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e			
203	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
204	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
205	2/a	2/a	2/a	2/a										
206	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
207	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
208	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
209	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
210	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
211	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
212	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
213	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
214	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
215	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
216	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
217	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
218	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
219	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
220	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
221		2/a			2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
222		2/a							2/a/e		2/a/e			
223	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
224	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
225	2/a	2/a	2/a	2/a										
226	2/a	2/a	2/a	2/a										
227	2/a	2/a	2/a	2/a										
228	2/a	2/a	2/a	2/a										
229	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
230	2/a	2/a	2/a	2/a										
231		2/a							2/a/e		2/a/e			
233	2/a		2/a	2/a	2/a	2/a	2/a					2	2	2
235	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
236	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
237	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
238	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
239	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
242	2/a	2/a	2/a	2/a										
243	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
244	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Codes	L2				MIRA ⇒ 1 Flash-EPROM			MIRA ⇒ 2 Flash-EPROM's				MIRA ⇒ 1 Flash-EPROM		
					Networked			Networked				stand alone		
	Appl. 7 Service counter/SS	Appl. 5 Cash register	Appl. 3 Pre-Pack 2	Appl. 27 Pre-Pack 2,Trac.	Appl. 1 Service counter	Appl. 2 Service counter/SS	Appl. 4 LP-f1	Appl. 5 Service counter/SS	Appl. 3 Cash register	Appl. 25 f2 Serv. counter/SS	Appl. 23 f2 Cash register	Appl. 60 Service counter	Appl. 61 Service counter/SS	Appl. 70 LP-f1
ArcNet	LL07	LL05	LL03	LL27	LM01	LM02	LM04	LM05 LF05	LM03 LF03	LM25 LF25	LM23 LF23	LM60	LM61	LM70
Ethernet								LE05	LE03	LE25	LE23			
245	2/a	2/a	2/a	2/a										
246		2/a							2/a/e		2/a/e			
248		2/a												
249		2/a							2/a/e		2/a/e			
250		2/a							2/a/e		2/a/e			
251		2/a							2/a/e		2/a/e			
252		2/a							2/a/e		2/a/e			
253	2/a	2/a	2/a	2/a				2/a/e	2/a/e	2/a/e	2/a/e			
255		2/a							2/a/e		2/a/e			
256		2/a							2/a/e		2/a/e			
257	2/a	2/a	2/a	2/a										
258	2/a	2/a	2/a	2/a										
260					2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
261					2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
262					2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
266														
267	2/a	2/a	2/a	2/a										
269	2/a	2/a	2/a	2/a				2/a/e	2/a/e	2/a/e	2/a/e			
270	2/a	2/a	2/a	2/a				2/a/e	2/a/e	2/a/e	2/a/e			
271				2/a										
272				2/a										
273				2/a										
274	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
275								2/a/e	2/a/e	2/a/e	2/a/e			
276		2/a							2/a/e		2/a/e			
277								2/a/e	2/a/e	2/a/e	2/a/e			
278									2/a/e		2/a/e			
279	2/a	2/a	2/a					2/a/e	2/a/e	2/a/e	2/a/e			
280									2/a/e		2/a/e			
281								2/a/e	2/a/e	2/a/e	2/a/e			
283									2/a/e		2/a/e			
285								2/a/e	2/a/e	2/a/e	2/a/e			
287								2/a/e	2/a/e	2/a/e	2/a/e	not for	LM03	LM23
288								2/a/e	2/a/e	2/a/e	2/a/e	not for	LM03	LM23
289								2/a/e	2/a/e	2/a/e	2/a/e	not for	LM03	LM23

III-B Access Codes for Individual Sales ⇒ Codes 4XX

Codes	L2				LP/M ⇒ 1 Flash-EPROM			LP/M ⇒ 2 Flash-EPROM's				LP/M ⇒ 1 Flash-EPROM		
					Networked			Networked				stand alone		
	Appl. 7 Service counter/SS	Appl. 5 Cash register	Appl. 3 Pre-Pack 2	Appl. 27 Pre-Pack 2,Trac.	Appl. 1 Service counter	Appl. 2 Service counter/SS	Appl. 4 LP-f1	Appl. 5 Service counter/SS	Appl. 3 Cash register	Appl. 25 f2 Serv. counter/SS	Appl. 23 f2 Cash register	Appl. 60 Service counter	Appl. 61 Service counter/SS	Appl. 70 LP-f1
<i>ArcNet</i>	LL07	LL05	LL03	LL27	LM01	LM02	LM04	LM05 LF05	LM03 LF03	LM25 LF25	LM23 LF23	LM60	LM61	LM70
<i>Ethernet</i>								LE05	LE03	LE25	LE23			
400	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
401	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
402	2/a	2/a	2/a	2/a										
403	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
404	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
405	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
406	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
407	2/a	2/a	2/a	2/a										
408	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
409		2/a				2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e		2	2
410		2/a							2/a/e		2/a/e			
411	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
412	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
426				2/a ¹										
427				2/a ¹										

III-C Access Codes for Reports ⇒ Codes 5XX

Kennung n	L2				LP/M ⇒ 1 Flash-EPROM			LP/M ⇒ 2 Flash-EPROM's				LP/M ⇒ 1 Flash-EPROM		
					Verbund			Verbund				stand alone		
	Appl. 7 Bed./SB	Appl. 5 Kasse	Appl. 3 VV2	Appl. 27 VV2,Trac.	Appl. 1 Bedien	Appl. 2 Bed./SB	Appl. 4 LP-f1	Appl. 5 Bed./SB	Appl. 3 Kasse	Appl. 25 f2 Bed./SB	Appl. 23 f2 Kasse	Appl. 60 Bedien	Appl. 61 Bed./SB	Appl. 70 LP-f1
<i>ArcNet</i>	LL07	LL05	LL03	LL27	LM01	LM02	LM04	LM05 LF05	LM03 LF03	LM25 LF25	LM23 LF23	LM60	LM61	LM70
<i>Ethernet</i>								LE05	LE03	LE25	LE23			
500	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
501	2/a	2/a	2/a	2/a										
502	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
503	2/a	2/a	2/a	2/a										
504	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
505	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
506	2/a	2/a	2/a	2/a										
507	2/a	2/a	2/a	2/a										
508	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
509	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
510	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
511	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
512	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
517		2/a							2/a/e		2/a/e			
518		2/a							2/a/e		2/a/e			
519		2/a							2/a/e		2/a/e			
520		2/a							2/a/e		2/a/e			
521		2/a												
522		2/a							2/a/e		2/a/e			
523		2/a							2/a/e		2/a/e			
524		2/a							2/a/e		2/a/e			
530				2/a										
532									2/a/e		2/a/e			
533									2/a/e		2/a/e			
596								2/a/e	2/a/e	2/a/e	2/a/e			
598								2/a/e	2/a/e	2/a/e	2/a/e			
616		2/a							2/a/e		2/a/e			

III-D Access Codes for the TAF Journal ⇒ Codes 8XX

Codes	L2				LP/M ⇒ 1 Flash-EPROM			LP/M ⇒ 2 Flash-EPROM's				LP/M ⇒ 1 Flash-EPROM		
					Networked			Networked				stand alone		
	Appl. 7 Service counter/SS	Appl. 5 Cash register	Appl. 3 Pre-Pack 2	Appl. 27 Pre-Pack 2, Trac.	Appl. 1 Service counter	Appl. 2 Service counter/SS	Appl. 4 LP-f1	Appl. 5 Service counter/SS	Appl. 3 Cash register	Appl. 25 f2 Serv. counter/SS	Appl. 23 f2 Cash register	Appl. 60 Service counter	Appl. 61 Service counter/SS	Appl. 70 LP-f1
<i>ArcNet</i>	LL07	LL05	LL03	LL27	LM01	LM02	LM04	LM05 LF05	LM03 LF03	LM25 LF25	LM23 LF23	LM60	LM61	LM70
<i>Ethernet</i>								LE05	LE03	LE25	LE23			
800	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
801	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e			2	2	2
802		2/a							2/a/e					
803	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e			2	2	2
804	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e			2	2	2
805		2/a			2/a	2/a	2/a	2/a/e	2/a/e			2	2	2
806		2/a			2/a	2/a	2/a	2/a/e	2/a/e			2	2	2
807	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
808	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
809	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
810	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
811		2/a							2/a/e					
812		2/a							2/a/e					
813	2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2
816	2/a		2/a	2/a	2/a	2/a	2/a	2/a/e				2	2	2
817									2/a/e		2/a/e			
818									2/a/e					
819									2/a/e					
820									2/a/e					
821									2/a/e		2/a/e			
822								2/a/e	2/a/e	2/a/e	2/a/e	not for	LM03	LM23

IV Access Code Functional Groups

IV-A Configuring and Checking a Scale Network

Access Code: 5

Function: Request Network Status

This function returns the current status of the network and the status of devices and scales in a department (based on the Network Map).

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a 2/a 2/a 2/a 2/a 2/a 2/a/e 2/a/e 2/a/e 2/a/e 2/a/e 2/a/e 2/a/e

Command

N	1	CMD	0d	(1)
N	5	Access Code	5d	(5)
F	4	Control	Access	(4)
			<i>for a pure L2-Network</i>	
			<i>0d = Scale circuit 0</i>	
			<i>for a mixed scale circuit</i>	
			<i>0d = all scale circuits</i>	
			<i>0 - 9d = individual Scale Circuit, (see Access Code 200)</i>	
N	4	Department	1 - 9999d,	(4)
			<i>0d = entire network</i>	
N	2	Scale Number	1 - 64d,	(2)
			<i>0d = all scales in the department.</i>	

			(16)	

Response

N	1	RSP	1,3d	(1)
N	5	Access Code	5d	(5)
F	4	Control	Status	(4)

Response	Meaning
0	OK
1	Network inactive
2	Network-Map missing
3	Function not executable
4	unknown department
5	unknown scale

N	4	Department	1 - 9999d,	(4)
			<i>0d = entire network</i>	
N	2	Scale number.	1 - 64d,	(2)
			<i>0d = all scales in a department</i>	
N	2	Number of scales	(max. 64)	(2)
N	2 \	Scale Number	1 - 99d	
	[64]			(192)
N	1 /	Status	0 - 1d	
			<i>0d = active</i>	
			<i>1d = inactive</i>	

			(210)	

Access Code: 6

Function: Request Cash Register Status

This function returns the current network status and the devices and scales in a department. This data is based on the Network Map.

LL07 2/a LL05 2/a L03 2/a LL27 2/a LM01 2/a LM02 2/a LM04 2/a LM05 2/a/e LM03 2/a/e LM25 2/a/e LM23 2/a/e LM60 LE61 LE70

Command

N	1	CMD	0d	(1)
N	5	Code	6d	(5)
F	4	Control	Access	(4)
			⇒ for a network of L2 scales only	
			0d = scale circuit 0	
			⇒ for a network of L2 and MIRA scales	
			0d = all scale circuits	
			0 - 9d = individual Scale Circuit (see Access Code 200)	
N	4	Department	1 - 9999d,	(4)
			0d = entire network	
N	2	Scale Number	1 - 64d,	(2)
			0d = all scales in the department	

			(16)	

Response

N	1	RSP	1,3d	(1)
N	5	Code	6d	(5)
F	4	Control	Status	(4)

Response	Meaning
0	OK
1	Network inactive
2	Network-Map missing
3	Function not executable
4	unknown department
5	unknown scale

N	4	Department	1 - 9999d,	(4)
			0d = entire network	
N	2	Scale Number	1 - 64d,	(2)
			0d = all scales in the department	
N	2	Number of scales	(max. 64)	(2)
N	2 \	Scale Number.	1 - 64d	(256)
	[64]			
N	2 /	Status		

			(274)	

Decimal value	Meaning	Bit
1	0 = Scale active 1 = Scale inactive	0
2	0 = no Cash register 1 = Cash register	1
4	0 = without cash draw 1 = with cash draw	2
8	0 = Cash register switched on 1 = Cash register switched off	3
16	0 = no Pre-Pack 2 1 = with Pre-Pack 2	4
32	Euro-Phase 1 ⇒ 0 = inactive 1 = active	5
64	Euro-Phase 2 ⇒ 0 = inactive 1 = active	6
	Don't care	7

Example: Status 38

⇒ A status value of 38 represents the sum of Values 2 and 4 and 32 (bits 1,2 and 5 are set to 1)

⇒ Scale active; cash register; with cash draw; cash register is switched on; no Pre-Pack 2

IV-B Data Entry - Access Codes 2XX

Definition of Access Control for Data Entry

In Command Messages, Access Type and Key are to be stated in the Control Field

Important! When entering new data, or deleting a record, only the primary key is to be used as a key. Furthermore, fields defined as keys in existing records can only be modified when the primary key has been given. The Status response in a response message is entered in the control field.

Access Type	Meaning
___ 0	write write a record
___ 1	delete delete a record
___ 2	read equal read the given record
___ 3	read greater or equal read the given record or the next record
___ 4	read less or equal read the given record or the previous record
___ 5	read greater read the next record
___ 6	read less read the previous record
___ 7	read all read all records
___ 8	delete all delete all records (only for Access Codes 207, 208 and 209)

Key	Meaning	Description
__ 0 _	Primary key	first field after the scale number
__ 1 _	Secondary key 1	second field after the scale number
__ 2 _	Secondary key 2	third field after the scale number
__ 3 _	Secondary key 3	fourth field after the scale number
__ 8 _	Issuing of department and scale number	error detection feature

Data Server	Meaning
for CMD __ 2 __	Data Server check Data Record Checks if records are the same in all scales belonging to a single department.
for RSP __ 2 __	Data equal Records are identical in all scales
__ F __	Data not equal Records are not identical in all scales

Status	Meaning	Description
0 ___	OK	
1 ___	file not created	
2 ___	no free record	
3 ___	file corrupt	
4 ___	not found	record not found
5 ___	wrong key	
6 ___	double key	more than one record exists with the same key
C ___	(12) bad parameter	an incorrect parameter has been sent
D ___	(13) general error	
E ___	(14) undefined command	
F ___	(15) not executable	

Access Code: 200

Function: Network Map

Read the Network Map

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e			

Command (read)

N	1	CMD/RSP	0d	(1)
N	5	Code	200d	(5)
F	4	Control	Access (read only)	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
<hr/>				
N	2	Record Number	0 - 64d	(2)
				(18)

Response (read)

N	1	CMD/RSP	1,3d	(1)
N	5	Code	200d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0 - 64d	(2)
<hr/>				
N	2	Record Number	0 - 64d	(2)
N	2	Node ID (= Scale No.)	1 - 64d	(2)
N	2	Number of departments	1 - 16d	(2)
N	4[16]	Department numbers	1 - 9999d	(64)
N	1	Network Type	0 - 2d	(1)
				<i>0d = stand alone</i>
				<i>1d = network</i>
				<i>2d = roving operator</i>
<hr/>				
N	2	Roving Operator group	1 - 16d,	(2)
				<i>0d = without roving operator</i>
N	1	Scale Circuit	0 - 9d	(1)
				<i>0 = L2 in pure L2 network</i>
				<i>1 = L2 in mixed network with MIRA or Infoline</i>
				<i>4 = MIRA only</i>
				<i>9 = Infoline only</i>
<hr/>				
C	11	Program Number		(11)
C	1	Scale Type	see table	(1)
				(102)

Details of the Field - Scale Type

To interpret data, the character value of the Scale Type field must be divided into its High- and Low-Nibble values (see Table 1). The information can then be used to determine the scale type using Tables 2 and 3

Char. value	0	1	2	3	4	5	6	7	8	9	:	;	<	-	>	?	P	Q	R	S	T	U	V	W	X	Y	Z	(\)	^	_	@
High Nibble	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
Low Nibble	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0

Table 1: High and Low nibble values and their corresponding characters

High Nibble value	Meaning
3	don't care
4	Infoline
5	don't care

Table 2: High Nibble values and their corresponding scale types

Low Nibble Value	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
Label data		X		X		X		X		X		X		X		X
Pre-Pack data			X	X			X	X			X	X			X	X
Cash register data					X	X	X	X					X	X	X	X
Pre-Pack 2 data									X	X	X	X	X	X	X	X

Table 3: Low Nibble values and their corresponding scale types

About the Response:

The record with the number "00" always contains information obtained from the scale that is connected to the PC.

Additionally, another record is listed from this scale that is in accordance with the scale number (or address) sequence of the scale network.

(I.e. The Network Map holds a record for each scale. However, the first record received is always "00" and this always originates from the actual scale connected to the PC. Another record is received from this scale at a later point time, this time with the scales correct record number).

Access Code: 201

Function: Scale Configuration

Working with Scale Configuration Data

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a 2/a 2/a 2/a 2/a 2/a 2/a/e 2/a/e 2/a/e 2/a/e

Note: for applications LL03, LL05, LL07, LM03, LM05, LM23 and LM25 - please use Access Code 279 (Scale Configuration – MIRA Specific) before using Access Code 201

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	201d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 99d	(2)
N	4	Number of PLUs	50 - XXXXd	(4)
			L2 ⇒ 3500	
			M ⇒ 9999	
			M-d ⇒ 300	
			M-f ⇒ 500	
			M-f1 ⇒ 500	
			M-f2 ⇒ 4000	
N	3	Number of Article Groups	10 - 200d	(3)
N	1	Number of Sales Levels	1 - 4d	(1)
N	3	Number of Checkout-Slips	100 - 999d (Cash register)	(3)
N	3	Number of Collection-Slips	100 - 999d (Cash register)	(3)
N	4	Number of Customer Entries	100 - 1000d	(4)
N	2	Number of Special Offers.	0 - 10d (2d for MIRA)	(2)
N	2	No. of Price Change Appointments	0 - 10d (0d for MIRA)	(2) only L2
N	3	Number of Product Texts.	0 - 100d	(3)
F	4	Configuration flag	Flag	(4)

Bit	Meaning	Value	Remarks
0	Minus-PLU	0 = no 1 = yes	
1	Operator Number with PI Number	--	Not used
2	CODE with PI Number	--	Not used
3	Inventory Mode	0 = no 1 = yes	
4	Service Counter Mode	0 = no 1 = yes	
5	Self-serve Mode	0 = no 1 = yes	
6	Pre-pack Mode	0 = no 1 = yes	
7-8	Self-serve Mode Sales	00 = without	
9-10	Pre-pack Mode Sales	01 = on service counter sales 10 = no meaning	
11	Order Mode	0 = no 1 = yes	only for Cash Register application
12	Customer Number on Checkout-Slip	0 = automatic 1 = manual	only for Cash Reg. application
13	Customer Number on Collection-Slip	0 = automatic 1 = manual	only for Cash Register application
14-15	don't care		

(45)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	201d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

(16)

Warning! When creating or modifying a scale configuration, all data saved in the respective scale (e.g. PLUs, article groups, etc.) will be deleted!

Access Code: 202

Function: User Configuration

Working with User Configuration data

LL07 2/a LL05 2/a L03 2/a LL27 2/a LM01 2/a LM02 2/a LM04 2/a LM05 2/a/e LM03 2/a/e LM25 2/a/e LM23 2/a/e LM60 LE61 LE70

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	202d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	1	Mode	0 - 1d <i>0d = service counter mode</i> <i>1d = self-serve mode</i>	(1)
N	1	Symbol keys	0 - 2d <i>0d = 25 symbol keys</i> <i>1d = 50 symbol keys</i> <i>2d = 100 symbol keys</i>	(1)
N	1	Printout	0 - 6d <i>0d = receipt</i> <i>1d = article label</i> <i>2d = article label(s) and total label</i> <i>3d = receipt with total label</i> <i>4d = receipt on label</i> <i>5d = article label(s) and receipt</i> <i>6d = endless label</i>	(1)
N	4	Default Department	0 - 9999d <i>0 = no default department.</i>	(4)
N	1	TLU Print	0 - 4d <i>1d = TLU print 1 line</i> <i>0d = no TLU print</i> <i>2d = TLU print 2 line</i> <i>3d = TLU print 3 line</i> <i>4d = TLU print 4 line</i>	(1)
F	4	User Config. 1	Flag	(4)

Bit	Meaning	Value
0	Print EAN on Receipt	0 = off 1 = on
1	Print EAN on Counterfoil Receipt	0 = off 1 = on
2	Print Total weight	0 = off 1 = on
3	Print PLU	0 = off 1 = on
4	Counterfoil Receipt	0 = off 1 = on
5	Print Header Text	0 = off 1 = on
6	Print Footer Text	0 = off 1 = on
7	Print Store Name text	0 = off 1 = on
8	Print Operator Text	0 = off 1 = on
9	Print Roving Operator Group Name	0 = off 1 = on
10	Operator -Sign-on / Sign-off	0 = enable 1 = disable
11	Short Sign-Off	0 = off 1 = on
12	Receipt number font	0 = small 1 = large
13	Product Text	0 = without 1 = with
14	Department Specific Receipt	0 = no 1 = yes
15	Running Text	0 = off 1 = on

F 4 User Configuration 2 Flag

(4)

Bit	Meaning	Value
0	Default Price	0 = Selling Price 1 1 = Selling Price 2
1	Selling Price 2	0 = no 1 = yes
2	Purchase Price	0 = no 1 = yes
3	Block Prices	0 = no 1 = yes
4	Enter base price with	0 = # 1 = Numeric keys
5	Auto placement of decimal point in Base Price	0 = disable 1 = enable
6	Print price modification list	0 = no 1 = yes
7	Traffic Light Smiley	0 = no 1 = yes
8	Quick Serve	0 = no 1 = yes
9	Label with receipt number	0 = no 1 = yes
10	Print key	0 = no 1 = yes
11	Mini Prepacking	0 = no 1 = yes
12-13	Self-Serve Under Zero Alert	00 = Variant 1 01 = Variant 2 10 = Variant 3 11 = Variant 4
14	Print Tare value	0 = no 1 = yes
15	with Receipt repetition	0 = no 1 = yes

(32)**Command (delete or read) / Response (create, modify or delete)**

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	202d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

(16)

Access Code: 203
Function: Store Name Text

Working with Store Name text

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	203d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
C	20	Store Description	ASCII character	(20)

				(36)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	203d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Access Code: 204
Function: Operator Register

Working with Operator Data

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	204d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Operator Number	1 - 99d	(3)
C	20	Operator Name	ASCII characters	(20)

				(39)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	204d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d,	(4)
N	2	Scale Number	0d	(2)
N	3	Operator Number	1 - 99d	(3)

				(19)

Access Code: 205
Function: Roving Operator Group

Handling Roving Operator Master Data

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
 2/a 2/a 2/a 2/a

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	205d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Roving Operator No.	1 - 15d	(2)
C	20	Rov. Op. Group Name	ASCII character	(20)

				(38)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	205d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Rov. Op. Group Name	1 - 15d	(2)

				(18)

Access Code: 206

Function: Department Data

Working with Department Data

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	206d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Department Number.	1 - 9999d	(4)
C	20	Dept. Description	ASCII characters	(20)
N	4	Default Department	1 - 9999d	(4) only for L2
N	2	EAN-Code Number	0 - 32d	(2)
			<i>0=no EAN-Code</i>	

(46)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	206d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Department Number	1 - 9999d	(4)

(20)

Access Code: 207

Function: Article Data

Working with Article Data

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	207d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	6	PLU Number	1 - 999999d	(6)
C	13	EAN Number	ASCII- Numeric	(13)
C	100	Article Description	ASCII character	(100)
N	8	Selling Price 1	+/- 0 - 999999(9)d	(8)
N	8	Selling Price 2	+/- 0 - 999999(9)d	(8) only L2, LP K
N	1 [2]	VAT Number	0 - 9d	(2)
N	8	Purchase-Price	+/- 0 - 999999(9)d	(8) only for L2
N	4	Special Offer Number	!! disabled !!)	(4)
N	8 [2]	Staggered Price	+/- 0 - 999999(9)d	(16)
N	8 [2]	Staggered Limit	Pieces / Weight (g)	(16)
N	4	Article Group	1 - 9999d	(4)
N	2	Tare number	1 - 99d, 0 = without Tare	(2)
F	4	Article Flag	Flag	(4)

Bit	Meaning	Value	Rem.
0	Weigh-/Non-weigh PLU	0 = Weigh 1 = non-weigh	
1	Price overwrite	0 = no 1 = yes	
2	Special Offer !! disabled !!)		
3	Don't care		
4	Block article	0 = no 1 = yes	
5	Enable discount	0 = no 1 = yes	
6	Reset PLU on Special Offer	(read only)	
7	Special Offer PLU is reset	(read only)	
8 - 9	Traffic Light Smiley	00 = without 01 = green 10 = red 11 = depending on margin	only for L2
10-11	Don't care		
12-15	Don't care		

N	3	Red-Yellow Limit	0 - 100d. 0 = don't display	(3) only for L2
N	3	Yellow-Green Limit	0 - 100d 0 = don't display	(3) only for L2
N	3	Product Text num.	0 - 999d 0 = no text	(3)

(216)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	207d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d,	(4)
N	2	Scale Number	0d	(2)
N	6	PLU Number	1 - 999999d	(6)
C	13	EAN Number	ASCII- Numeric	(13) -> S-Key 1
C	10	Article Description	ASCII characters	(10) -> S-Key 2

				(45)

Access Code: 208**Function: Article Data – 1st Supplement for Labels**

Working with Article Data

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	208d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	6	PLU Number	1 - 999999d	(6)
N	2	Label Definition No.	0 - 32d, 0 = no label	(2)
F	4	Layout flags	Flag	(4)

Bit	Meaning	Value
0-1	PLU Text alignment	00: align left 01: centre 10: auto align
2-15	Don't care	

N	2 [4]	TLU Font	0 - 20d	(8)
N	2	Ingredients Font	0 - 20d	(2)
N	2	Organisat. Name Txt. No.	0 - 1d, 0d=no Organisation Name Text	(2)
			1 - 15d for L2	
N	2	Advertising Text No.	0 - 1d, 0d=no Advertising Text	(2)
			1 - 15d for L2	
N	2	Packing Date Text No.	1 - 30d, 0d=no Date text	(2)
N	2	Sell By Date Text No.	1 - 30d, 0d=no Date text	(2)
N	2	Use By Date Text No.	1 - 30d, 0d=no Date text	(2)
F	4	Date flags	Flag	(4)

Bit	Meaning	Value
0 - 2	Packing date	see below
3 - 5	Sell by date	see below
6 - 8	Use by date	see below
9 -15	Don't care	

Value for Date Flag

000	⇒ Do not print date
001	⇒ Print date
010	⇒ Print date with AM / PM Identifier and year
011	⇒ Print date without year
100	⇒ Print date with AM / PM Identifier without year
101	⇒ Print no. of days offset

F	4	Date Strike-Through flags	Flag	(4)
---	---	---------------------------	------	------

Bit	Meaning	Value	Rem.
0	Packing Date	0 = Don't strike-through 1 = Strike-through	
1	Sell By Date		
2	Use By Date		
3 -14	Don't care		
15	To calculate the fixed-weight base price of a non-weigh PLU and print it on a label	0 = Don't print base price of non-weigh PLU 1 = Calculate base price of non-weigh PLU and print it	Only for L2 scales using application 03 or 27

F 4 Labelling Flags Flag (4)

Bit	Meaning	Value
0 - 7	Currency	not used
8 -15	Unit	not used

N	5	Nutri Value	0 - 99999d	(5) only for L2
N	3	Sell by Date - offset	0 - 999d	(3)
N	3	Use by Date - offset	0 - 999d	(3)
N	11	Fixed Weight	(g / without Comma)	(11)
N	11	Plus-Weight	(g / without Comma)	(11) only for L2
N	11	Minus1-Weight	(g / without Comma)	(11) only for L2
N	11	Minus2-Weight	(g / without Comma)	(11) only for L2
N	5	Ave. Product Length	(mm)	(5) only for L2
N	5	Space Between Items	(mm) (for light barrier)	(5) only for L2
N	5	Label Position	(mm) (0 = central, >0 = from leading edge)	(5) only for L2

(130)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	208d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	6	PLU Number	1 - 999999d	(6)

(22)

Access Code: 209**Function: Article Data – 2nd Supplement for Labels**

Working with Article data

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	209d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	6	PLU Number	1 - 999999d	(6)
N	1	Block Number	0 - 1d	(1) only for L2
C	n	Ingredients Text	ASCII character	(n)
			for L2: n= 1 - 450	
			for LP/M: n= 1 - 300	
			(incl. font size, Line Feed (char 210))	

 (23 + n)
 for L2 max. 473
 for MIRA max. 323

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	209d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d,	(4)
N	2	Scale Number	0d	(2)
N	6	PLU Number	1 - 999999d	(6)
N	1	Block Number	0 - 1d	(1) only for L2
				(23)

Access Code: 210

Function: Article Group Data

Working with Article Groups

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	210d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	4	Article Group Number	1 - 9999d	(4)
C	20	Article Group Description	ASCII character	(20)
N	4	Main Article Group Number	1 - 9999d	(4) only for L2

				(44)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	210d	(5)
F	4	Control	Access | Key | Status (delete is only possible when no PLUs have been assigned- to the article group)	(4)
N	4	Department	1 -9999d	(4)
N	2	Scale Number	0d	(2)
N	4	Article Group Number	1 - 9999d	(4)

				(20)

Access Code: 211

Function: Receipt Text - Header and Footer

Working with Receipt Texts

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	211d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	1	Receipt Text number.	0 - 1d <i>0 = header</i> <i>1 = footer</i>	(1)
C	140	Receipt Text	ASCII character <i>(include font size for each line)</i>	(140)

				(157)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	211d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	1	Receipt Text Number	0 - 1d <i>0 = header</i> <i>1 = footer</i>	(1)

				(17)

Access Code: 212

Function: Store Name Text for Labels

Working with Store Name Text

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	212d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Store Name Text No.	1d	(2)
			1 - 15d for L2	
C	70	Store Name Text	ASCII character	(70)

				(88)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	212d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Store Name Text No.	1 - 15d	(2)

				(18)

Access Code: 213
Function: Running Text

Working with Running Text

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	213d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
C 100 Running Text ASCII character				(100)

				(116)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	213d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

				(16)

Access Code: 214

Function: EAN Codes (not including EAN128)

Working with EAN-Codes (only for EAN8 and EAN13)

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	214d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	2	EAN Code Number	1 - 32d	(2)
N	1	EAN Type	0 - 8d	(1)
C	13	EAN Code	(see EAN Code Details)	(13)

				(32)

EAN Code Details

Legends of EAN Values	Number of characters
C = Check digit	1
N = Running receipt number	4
P = PLU number	4
W = Article Group number	3
A = Article number	4/5
B = Amount	5/6
Q = Quantity	4/5
0-9 (digits)	12

Possible placing of EAN Value in Barcode

EAN Position	Possible Values
1 to 6	0-9, A, W, N, P,
7 or 8:	C
8 to 12:	B, Q, 0-9
13:	C

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	214d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	2	EAN-Code Number	1 - 32d	(2)

				(18)

Access Code: 215

Function: Tare Memory

Working with tare values

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	215d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	2	Tare Number	1 - 16d	(2)
N	8	Tare Number	(g)	(8)

				(26)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	215d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	2	Tare Number	1 - 16d	(2)

				(18)

Access Code: 216

Function: Fixed Keys

Allocation of Fixed Keys

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	216d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	Fixed Key Number	1 - 109d (upper limit depends on type of keyboard in scale)	(3)
N	4	Department Number	1 - 9999d	(4)
N	6	PLU Number	1 - 999999d	(6)
N	4	Dept. Number-Shift	1 - 9999d	(4) only for L2
N	6	PLU Number-Shift	1 - 999999d	(6) only for L2

(39)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	216d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	Fixed Key Number	1 - 109d (upper limit depends on Type of keyboard in scale)	(3)

(19)

Access Code: 217**Function: Pictograph Keys, for Self-Serve Applications**

Allocation of Pictograph Keys

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	217d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	Pictogram Key Number	1 - 144d (upper limit depends on type of keyboard in scale)	(3)
N	4	Department Number	1 - 9999d	(4)
N	6	PLU Number	1 - 999999d	(6)

				(29)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	217d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	Pictogram Key Number	1 - 144d (upper limit depends on type of keyboard in scale)	(3)

				(19)

Access Code: 218
Function: VAT

Working with VAT Rates

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	218d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	VAT Number	0 - 15d	(2)
N	4	VAT Rate	0 - 9999d	(4)
				(without decimal point)
				VAT Rate format ###.## (00.00 to 99.99)

(22)

Reserved VAT Numbers

Number	reserved for
10	Plus - manual input of Selling Price 1
11	Input of Open Base Price, Selling Price 1
12	Plus - manual input Selling Price 2
13	Input of Open Base Price, Selling Price 2

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	218d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	VAT Number	0 - 15d	(2)

(18)

Access Code: 219
Function: Date Text

Working with Date Text

LL07 2/a	LL05 2/a	L03 2/a	LL27 2/a	LM01 2/a	LM02 2/a	LM04 2/a	LM05 2/a/e	LM03 2/a/e	LM25 2/a/e	LM23 2/a/e	LM60 2	LE61 2	LE70 2
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Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	219d	(5)
F	4	Control	Access Key Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Date Text Number	1 - 30d	(2)
			<i>1 - 10 = Packing date</i>	
			<i>11 - 20 = Sell-by date</i>	
			<i>21 - 30 = Use-by date</i>	
C	30	Date Texts	ASCII character	(30)

				(48)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	219d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Date Text Number	1 - 30d	(2)

				(18)

Access Code: 220
Function: Advertising Text

Working with Advertising Text.

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	220d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Advertising Text Number	0 - 9d for MIRA	(2)
			1 - 15d for L2	
C	60	Advertising Text	ASCII character	(60)

				(78)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	220d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Advertising Text Number	0 - 9d for MIRA	(2)
			1 - 15d for L2	

				(18)

Access Code: 221

Function: Mark-ups / Discounts

Working with Mark-ups / Discounts / Discounts. Mark-ups / Discounts and Discounts can also be used on MIRA scales not running a cash register application

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
	2/a			2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	221d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Mark-up / Discount Number	0 - 9d	(1)
C	20	Text (Display)	ASCII character	(20)
C	20	Text (Printer)	ASCII character	(20)
N	5	Mark-up / Discount (%)	+/- 0 - 9999d	(5)
			<i>(input without decimal point)</i>	
			<i>Mark-up / Discount format ###.## (00.00 to 99.99)</i>	

				(62)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	221d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Mark-up / Discount Number	0 - 9d	(1)

				(17)

Working with Sales Categories

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	222d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Sales Category Number	0 - 9d	(1)
C	20	Description	ASCII character	(20)
N	1	Print VAT	0d = no / 1d = yes	(1)

				(38)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	222d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Sales Category Number 0 - 9d		(1)

				(17)

Access Code: 223**Function: Special Offers - Part 1 ⇒ Parameters**

Working with Special Offers

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	223d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Special Offer Number	1 - 9999d	(4)
C	20	Special Offer Text	ASCII character	(20)
C	20	Special Offer Receipt Text	ASCII character	(20)
N	2 [3]	Start Date	dd / mm / yy	(6)
N	2 [2]	Start Time	hh / mm	(4)
N	2 [3]	End Date	dd / mm / yy	(6)
N	2 [2]	End Time	hh / mm	(4)
N	1	Special Offer Status	0 - 8d	(1)
0d = special offer not in use 1d = special offer in use (RSP) 2d = special offer expired (RSP) 3d = special offer available (RSP) (after concluding special offer report) 8d = special offer ready for use(!!!)				

				(81)

(!!!): After using Access Code 224, use this record (Status 8) to indicate that the creation of a Special Offer is complete, so that the automatic Special Offer management is enabled !

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	223d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Special Offer Number	1 - 9999d	(4)

				(20)

Access Code: 224**Function: Special Offers - Part 2 ⇒ Assigning Articles**

Working with Special Offers – assigning articles to a Special Offer

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	224d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Special Offer Number	1 - 9999d	(4)
N	4	Department	1 - 9999d	(4)
N	6	PLU Number	1 - 999999d	(6)
N	8[2]	Special Offer Price (RSP)	+/- 0 - 999999(9)d	(16)
N	8[2]	Selling Price (RSP)	+/- 0 - 999999(9)d	(16)

				(62)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	224d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Special Offer Number	1 - 9999d	(4)
N	4	Department	1 - 9999d	(4)
N	6	PLU Number	1 - 999999d	(6)

				(30)

Access Code: 225**Function: Time-Governed Price Changes - Part 1 ⇒ Parameters**

Working with Time-Governed Price Changes

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a										

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	225d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Price Change Number	1 - 9999d	(4)
C	20	Price Change Text	ASCII character	(20)
N	2[3]	Start Date	dd / mm / yy	(6)
N	2[2]	Start Time	hh / mm	(4)
N	1	Price Change Status	0 - 9d	(1)
			0d = price change not in use	
			1d = price change in use (RSP)	
			8d = price change ready for use (!!!)	

(51)

(!!!): After using Access Codes 225 and 226, use this record (Status 8) to indicate that the creation of a Price Change is complete, so that the automatic Price Change management is enabled !

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	225d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Price Change Number	1 - 9999d	(4)
				(20)

Access Code: 226**Function: Time-Governed Price Changes - Part 2 ⇒ Assigning Articles**

Working with Time-Governed Price Changes

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a										

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	226d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Price Change Number	1 - 9999d	(4)
N	4	Department	1 - 9999d	(4)
N	6	PLU Number	1 - 999999d	(6)
N	8[2]	Future Price	+/- 0 - 999999(9)d	(16)

				(46)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	226d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Price Change Number	1 - 9999d	(4)
N	4	Department	1 - 9999d	(4)
N	6	PLU Number	1 - 999999d	(6)

				(30)

Access Code: 227

Function: Main Department Data

Working with Main Department Data

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a 2/a 2/a

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	227d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Default Department No.	1 - 9999d	(4)
C	20	Description	ASCII character	(20)

				(40)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	227d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Default Department No.	1 - 9999d	(4)

				(20)

Access Code: 228

Function: Main Article Group Data

Working with Main Article Groups

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a 2/a 2/a

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	228d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	4	Main Article Group No.	1 - 9999d	(4)
C	20	Description	ASCII character	(20)

				(40)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	228d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 -9999d	(4)
N	2	Scale Number	0d	(2)
N	4	Main Article Group No.	1 - 9999d	(4)

				(20)

Access Code: 229

Function: Product Text Data

Working with Product Texts

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	229d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	4	Product Text Number	1 - 50d for LP	(4)
			1 - 100d for L2	
C	100	Product Text	ASCII character	(100)

				(120)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	229d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	4	Product Text Number	1 - 50d bei LP	(4)
			1 - 100d for L2	

				(20)

Access Code: 230

Function: Label Types L2 (also see Access Code 242)

Working with Label Types

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a 2/a 2/a

!!! all x- and y- positions and lengths are to be entered in dots !!!

!!! Access Code 242 should be used after using Access Code 230...!!!
If Access Code 230 is used to create or modify label settings, settings previously made using Access Code 242 are overwritten. If settings for label separation and their tolerances are to be used, they would have to be newly set using Access Code 242, after Access Code 230 has been used.

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	230d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Label Definition Number	0 - 32d 0: no Label(2)	
N	2	Bitmap Number	0 - 16d, 0: no bitmap	(2)
N	3	Label Width	1 - 640d +64 (64-80): rewind - on	(3)
N	3	Label Length	1 - 816d	(3)
N	1	Print Direction	0 - 1d 0 = readable / 1 = reverse	(1)
Graphic Objects				
N	1 [5]	Graphic Object Type	0 - 6d 0 = don't print 1 = print horizontal line 2 = print vertical line 3 = print rectangular frame 4 = print circle 5 = print diagonal 6 = print ellipse	(5)
N	3 [5]	G. x-Position	1 - 640d	(15)
N	3 [5]	G. y-Position	1 - 816d	(15)
N	1 [5]	G. Line Thickness	1 - 8d	(5)
N	3 [5]	G. Length	1 - 640d or radius	(15)
N	3 [5]	G. Height	0 - 816d, 0 = Line	(15)
N	1 [5]	G. Line Style	0 - 1 0d = continuous line 1d = dashed line	(5)
PLU/Ingredients				
N	1	PI Switch	0 - 4d 0 = no text 1 = textfield is rectangular 2 = textfield with rectangular border, left aligned 3 = textfield with rectangular border, right aligned 4 = textfield with rectangular border, entire length	(1)
N	2	PI Line Spacing	0 - nnd	(2)
N	1	PI Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	PI x-Position	1 - 640d	(3)
N	3	PI y-Position	1 - 816d	(3)
N	3	PI Field Height	1 - 816d	(3)
N	3	PI Field Width	1 - 640d	(3)
PLU/Ingredient/Rectangular Border				
N	3	PIR x-Position	1 - 640d	(3)
N	3	PIR y-Position	1 - 816d	(3)
N	3	PIR Field Height	0 - 816d	(3)
N	3	PIR Field Width	0 - 816d	(3)

Organisation Name Text				
N	1	ONT print direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	ONT x-Position	0 - 640d, 0 = no ONT	(3)
N	3	ONT y-Position	1 - 816d	(3)
N	3	ONT Field Height	1 - 816d	(3)
N	3	ONT Field Width	1 - 640d	(3)
Advertising Text				
N	1	AT Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	AT x-Position	0 - 640d, 0 = no AT	(3)
N	3	AT y-Position	1 - 816d	(3)
N	3	AT Field Height	1 - 816d	(3)
N	3	AT Field Width	1 - 640d	(3)
Miscellaneous Text				
N	2[4]	MT Font Size	0 - 20d, 0 = no MT	(8)
N	1[4]	MT Print Direction	0d=0°, 1d=90°, 3d=270°	(4)
N	3[4]	MT x-Position	1 - 640d	(12)
N	3[4]	MT y-Position	1 - 816d	(12)
C	30[4]	MT Text	ASCII character	(120)
Dates				
N	2[3]	DA Font Size	0 - 20d, 0 = no DA	(6)
N	1[3]	DA Print Direction	0d=0°, 1d=90°, 3d=270°	(3)
N	3[3]	DA x-Position	0 - 640d	(9)
N	3[3]	DA y-Position	0 - 816d	(9)
x=y=0 = One date after the other				
Date Texts				
N	1[3]	DAT Print Direction	0d=0°, 1d=90°, 3d=270°	(3)
N	3[3]	DAT x-Position	0 - 640d, 0 = no DAT	(9)
N	3[3]	DAT y-Position	1 - 816d	(9)
N	3[3]	DAT Field Height	1 - 816d	(9)
N	3[3]	DAT Field Width	1 - 640d	(9)
Date Strike-Through Fields (X)				
	1[3]	DAX Print Direction	0d=0°, 1d=90°, 3d=270°	(3)
N	3[3]	DAX x-Pos	1 - 640d, 0=do not strike through	(9)
N	3[3]	DAX y-Position	1 - 816d	(9)
N	3[3]	DAX Field Height	1 - 816d	(9)
N	3[3]	DAX Field Width	1 - 640d	(9)
EAN Code				
N	2	EAN Code Number	0 - 32d, 0 = no EAN	(2)
N	3	EAN Field Height	1 - 816d	(3)
N	3	EAN Field Width	0d = Standard, 1d = wide	(3)
N	1	EAN Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	EAN x-Position	1 - 640d	(3)
N	3	EAN y-Position	1 - 816d	(3)
Weight				
N	2	Weight Font Size	0 - 20d, 0 = no Weight	(2)
N	1	Weight Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	Weight Value (numeric)	1 - 10d	(2)
N	3	Weight x-Position	1 - 640d	(3)
N	3	Weight y-Position	1 - 816d	(3)
Weight Unit				
N	2	Weight Unit Font Size	0 - 20d, 0 = no Weight Unit	(2)
N	1	Weight Unit Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	Weight Unit x-Position	1 - 640d	(3)
N	3	Weight Unit y-Position	1 - 816d	(3)
C	5	Weight Unit Text	ASCII characters	(5)
Price				
N	2	Price Font Size	0 - 20d, 0 = no Price	(2)
N	1	Price Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	Price Value (numeric)	1 - 10d	(2)
N	3	Price x-Position	1 - 640d	(3)
N	3	Price y-Position	1 - 816d	(3)
Price Unit				
N	2	Price Unit Font Size	0 - 20d, 0 = no Price Unit	(2)
N	1	Price Unit Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	Price Unit x-Position	1 - 640d	(3)
N	3	Price Unit y-Position	1 - 816d	(3)
C	8	Price Unit Text	ASCII characters	(8)

<i>Amount Text</i>				
N	2	Amount Font Size	0 - 20d, 0 = no Amount Text	(2)
N	1	Amount Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	Amount No. of Characters	1 - 10d	(2)
N	3	Amount x-Position	1 - 640d	(3)
N	3	Amount y-Position	1 - 816d	(3)
<i>Amount Unit</i>				
N	2	Amount Unit Font Size	0 - 20d, 0 = no Amount Unit	(2)
N	1	Amount Unit Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	Amount Unit x-Position	1 - 640d	(3)
N	3	Amount Unit y-Position	1 - 816d	(3)
C	5	Amount Unit No. of Characters		(5)
<i>Nutri Value</i>				
N	2	Nutri Value Font Size	0 - 20d, 0 = no Nutri Value	(2)
N	1	Nutri Value Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	Nutri Value No. of Characters	1 - 10d	(2)
N	3	Nutri Value x-Position	1 - 640d	(3)
N	3	Nutri Value y-Position	1 - 816d	(3)
<i>Nutri Value Unit</i>				
N	2	NVU Font Size	0 - 20d, 0 = no NVU	(2)
N	1	NVU Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	NVU x-Position	1 - 640d	(3)
N	3	NVU y-Position	1 - 816d	(3)
C	8	NVU No. of Characters	ASCII characters	(8)
<i>PLU Number</i>				
N	2	PLU Font Size	0 - 20d, 0 = no PLU Number	(2)
N	1	PLU Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	PLU No. of Characters	1 - 10d	(2)
N	3	PLU x-Position	1 - 640d	(3)
N	3	PLU y-Position	1 - 816d	(3)
<i>Scale Number</i>				
N	2	Scale Num Font Size	0 - 20d, 0 = no Scale Num	(2)
N	1	Scale Num Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	Scale Num No. of Characters	1 - 10d	(2)
N	3	Scale Num x-Position	1 - 640d	(3)
N	3	Scale Num y-Position	1 - 816d	(3)
<i>Receipt Number</i>				
N	2	Rec Num Font Size	0 - 20d, 0 = no Rec Num	(2)
N	1	Rec Num Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	Rec Num No. of characters	1 - 10d	(2)
N	3	Rec Num x-Position	1 - 640d	(3)
N	3	Rec Num y-Position	1 - 816d	(3)
<i>Miscellaneous Value</i>				
N	2[4]	MV Font Size	0 - 20d, 0 = no MV	(8)
N	1[4]	MV Print Direction	0d=0°, 1d=90°, 3d=270°	(4)
N	3[4]	MV x-Position	1 - 640d	(12)
N	3[4]	MV y-Position	1 - 816d	(12)
C	10[4]	MV Text	ASCII characters	(40)

				(647)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	230d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Label Definition Number	0 - 32d	(2)

				(18)

Access Code: 231**Function: Payment Methods – Non EU Currencies**

Working with Payment Methods (e.g. cash, cheque, card, vouchers, foreign currency etc.)

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
	2/a							2/a/e		2/a/e			

This Access Code does not support EU currency exchange rates that are programmed into the scale or EU currencies as a payment method. For EU currencies, please use Access Code 276.

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	231d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Payment Method Text	1 - 9d	(1)
			<i>0d = base currency</i>	
			<i>9d = secondary currency</i>	
C	20	Description	ASCII character	(20)
C	3	Abbreviation	ASCII character	(3)
N	1	Decimal places	0 - 3d	(1)
N	1	Rounding	0 - 1d	(1)
			<i>0 = to nearest one</i>	
			<i>1 = to nearest five</i>	
N	11	Factor	(without decimal point, 1 10 100)	(11)
N	11	Rate	(without decimal point)	(11)

				(64)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	231d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Payment Method No.	1 - 9d	(1)

				(17)

Access Code: 233

Function: Keyboard Configuration – for non Cash Register Applications

Keyboard Function Allocation for non cash register software

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a		2/a	2/a	2/a	2/a	2/a					2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	233d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	Keyboard Type	0 - 6d	(3)
			0d = 144 key, L2	
			2d = 96 key, L2	
			3d = 83 key, L2	
			4d = 100 key, L2	
			5d = 79 key, MIRA	
			6d = 98 key, MIRA	
N	3	Fixed Key	0 - 109d	(3)
N	3	Operator Keys	2 - 61d L2	(3)
			2 - 70d MIRA	
N	3	Tare Keys	0 - 10d	(3)
N	3	Department Keys	0 - 16d	(3)
N	4[16]	Department numbers	0 - 9999d	(64)
F	4	Function Keys	see definition	(4)

Definition table for function key allocation

Bit	Meaning	Value	Remark
0	Void Key	0 = no / 1 = yes	
1	Change Key (i.e. for money)	0 = no / 1 = yes	
2	II Price Key	0 = no / 1 = yes	only for L2
3	Department Key	0 = no / 1 = yes	see)*
4	X Key (i.e. multiply)	0 = no / 1 = yes	
5	Article Group Key	0 = no / 1 = yes	see)*
6	Minus Key	0 = no / 1 = yes	
7	Plus Key	0 = no / 1 = yes	
8	Basket Key (only with Cash register)	0 = no / 1 = yes	see)*
9	Key Open Base Price	0 = no / 1 = yes	
10 - 15	Don't care		

)* In MIRA scales, these keys are to be programmed as special function keys

N 4[109] Special function keys

(436)

Definition table for Special function key allocation

Decimal	Meaning	Hex	Remark
0000 - 0511	Don't care (ASCII chars.)	000h - 1FFh	
0512 - 1023	Fixed Function Keys	200h - 3FFh	
1024 onwards	Programmable Function keys	400h onwards	
1024 - 1087	Mark-up / Discount key	400h - 43Fh	
1088 - 1151	Payment Method	440h - 47Fh	
1152 - 1215	Sales Category	480h - 4BFh	
1216 - 1279	Miscellaneous function keys	4C0h - 4FFh	
1216	Checkout-Slip key	4C0h	
1217	Collection-Slip key	4C1h	
1218	Basket key	4C2h	(only MIRA)
1232	Department key	4D0h	(only MIRA)
1233	Article Group key	4D1h	(only MIRA)
1536 onwards	PLU Fixed keys	600h onwards	
2048 onwards	Operator keys	800h onwards	
2560 onwards	Tare keys	A00h onwards	
3072 onwards	Direct Department keys	C00h onwards	

(535)**Command (read) / Response (create, modify)**

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	233d	(5)
F	4	Control	Access | Key | Status 1 – delete not possible	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
				----- (16)

Example of values for Function Key allocation

Decimal value	Function Key
1232	Department key
3074	Direct Department key (3072) for department 2 (+2)
1539	PLU Fixed key (1536) Number 3 (+3)
2561	Tare key (2560) Number 1 (+1)
1026	Mark-up / Discount (1024) Number 2 (+2)

Access Code: 235
Function: Scales - Lock / Unlock

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	235d	(5)
F	4	Control	0d	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Lock / Unlock.	0 - 1d 0 = <i>Unlock</i> 1 = <i>Lock</i>	(1)
C	20	Lock Text	ASCII characters	(20)

				(37)

Response

N	1	RSP	1,3d	(1)
N	5	Code	235d	(5)
N	4	Control	Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Access Code: 236**Function: Deletion of Article Based Sales – Without Deletion Date**

Performed after the final reading of sales

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	236d	(5)
F	4	Control	Sales level	(4)
			0000 = sales level 1	
			0100 = sales level 2	
			0200 = sales level 3	only for L2
			0300 = sales level 4	only for L2
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Sales Type	0 - 1d	(1)
			0 = general Sales (TAF is deleted)	
			1 = Special Offer Article Sales (TAF is not deleted)	
			2 = general sales (TAF is not deleted)	
N	2[3]	Deletion Date	not supported	(6)
N	2[2]	Deletion Time	not supported	(4)

				(27)

Note: Deletion Date and Deletion Time are supported in Access Code 598!

Response

N	1	RSP	1,3d	(1)
N	5	Code	236d	(5)
F	4	Control	Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Access Code: 237

Function: Configurable Report

Including Batch Data for Daily, Weekly, Monthly and Yearly Closing of Sales

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	237d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	1	Sales Closing Number	0 - 3d	(1)
			0 = sales closing 1	
			1 = sales closing 2	
			2 = sales closing 3 ⇒ only for L2	
			3 = sales closing 4 ⇒ only for L2	

N	1	Print intern. or external	0 - 1d	(1) only for L2
			0 = internal	
			1 = external	

F	4	Report CFG Flag	see Definition	(4)
---	---	-----------------	----------------	------

Bit	Meaning	Value
0	Include operator	0 = no / 1 = yes
1	Include Default Department	0 = no / 1 = yes
2	Include Department	0 = no / 1 = yes
3	Include Main Article Group	0 = no / 1 = yes
4	Include Article group	0 = no / 1 = yes
5	Include PLU	0 = no / 1 = yes
6	Include Special Offer	0 = no / 1 = yes
7	Include Price Change	0 = no / 1 = yes
8	Include Summary Journal	0 = no / 1 = yes
9	Journal Detailed Journal	0 = no / 1 = yes
10	Don't care	

(22)

Command (read) / Response (create, modify)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	237d	(5)
F	4	Control	Access | Key | Status	(4)
			1 – delete not possible	
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	1	Closing Number	0 - 2d	(1)
			0 = sales closing 1	
			1 = sales closing 2	
			2 = sales closing 3	only for L2
			3 = sales closing 4	only for L2

(17)

Access Code: 238
Function: Date / Time

Request or set time from scale network

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	238d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2[3]	Date	dd / mm / yy	(6)
N	2[3]	Time	hh / mm / ss	(6)

				(28)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	238d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Access Code: 239

Function: Configuration of COM1 / COM2

Set Interface parameters of COM1 or COM2 (Channel A, Channel B)

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Note: Access Code 239 takes effect only on the scale connected to the PC. On MIRA scales, the only configurable COM port is COM1 (i.e. Channel A) - COM2 (Channel B) is only for use with a cash-draw.

Command

N	1	CMD	0d	(1)																										
N	5	Code	239d	(5)																										
F	4	Control	Access Key Status	(4)																										
N	4	Department	0d	(4)																										
N	2	Scale Number	0d	(2)																										
N	1	COMx	0 - 1d	(1)																										
			0 = COM1 (Channel A)																											
			1 = COM2 (Channel B)	only for L2																										
	3	Method	0 - 255d	(3)																										
			0 = TransL2 without modem																											
			1 = TransL2 with modem	only for L2																										
			4 = external printer	only for L2																										
			5 = cash register system	only for L2																										
			6 = EAN Reader																											
			255 = COMx not functional																											
F	4	Protocol Flag		(4)																										
			<table><tr><th>Bit</th><th>Meaning</th><th>Value</th></tr><tr><td>0</td><td>Data bits</td><td>0 ⇔ 7 1 ⇔ 8</td></tr><tr><td>1- 2</td><td>Parity</td><td>00 ⇔ no 01 ⇔ even 10 ⇔ odd</td></tr><tr><td>3</td><td>Stop bits</td><td>0 ⇔ 1 1 ⇔ 2</td></tr><tr><td>4- 6</td><td>Baud rate</td><td>000 ⇔ 300 001 ⇔ 600 010 ⇔ 1200 011 ⇔ 2400 100 ⇔ 4800 101 ⇔ 9600 110 ⇔ 19200</td></tr><tr><td>7</td><td>Handshake</td><td>0 ⇔ without / 1 ⇔ with (Xon/Xoff)</td></tr><tr><td>8-12</td><td>Don't care</td><td></td></tr><tr><td>13-14</td><td>End of line</td><td>00 ⇔ CR/LF 01 ⇔ CR 10 ⇔ LF</td></tr><tr><td>15</td><td>Don't care</td><td></td></tr></table>	Bit	Meaning	Value	0	Data bits	0 ⇔ 7 1 ⇔ 8	1- 2	Parity	00 ⇔ no 01 ⇔ even 10 ⇔ odd	3	Stop bits	0 ⇔ 1 1 ⇔ 2	4- 6	Baud rate	000 ⇔ 300 001 ⇔ 600 010 ⇔ 1200 011 ⇔ 2400 100 ⇔ 4800 101 ⇔ 9600 110 ⇔ 19200	7	Handshake	0 ⇔ without / 1 ⇔ with (Xon/Xoff)	8-12	Don't care		13-14	End of line	00 ⇔ CR/LF 01 ⇔ CR 10 ⇔ LF	15	Don't care	
Bit	Meaning	Value																												
0	Data bits	0 ⇔ 7 1 ⇔ 8																												
1- 2	Parity	00 ⇔ no 01 ⇔ even 10 ⇔ odd																												
3	Stop bits	0 ⇔ 1 1 ⇔ 2																												
4- 6	Baud rate	000 ⇔ 300 001 ⇔ 600 010 ⇔ 1200 011 ⇔ 2400 100 ⇔ 4800 101 ⇔ 9600 110 ⇔ 19200																												
7	Handshake	0 ⇔ without / 1 ⇔ with (Xon/Xoff)																												
8-12	Don't care																													
13-14	End of line	00 ⇔ CR/LF 01 ⇔ CR 10 ⇔ LF																												
15	Don't care																													
N	3	Timeout (sec)	0-255d, 0d=wait forever	(3)																										
N	3	Wait time (min)	0-255d	(3)																										
C	31	Initialisation String		(31)																										
C	31	Hang-up String		(31)																										
C	31	Connect String		(31)																										

				(123)																										

Response

N	1	CMD	0d	(1)
N	5	Code	239d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	COMx	0 - 1d	(1)
			0 = COM1 (Channel A)	
			1 = COM2 (Channel B)	only for L2

				(17)

Access Code: 242**Function: Label Separation and Separation Tolerance**

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a										

!!! all x- and y- positions and lengths are to be entered in dots !!!

!!! Access Code 242 is a supplement to Access Code 230 !!!
 If Access Code 230 is used to create or modify label settings, settings previously made using Access Code 242 are overwritten. If settings for label separation and their tolerances are to be used, they would have to be newly set using Access Code 242, after Access Code 230 has been used.

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	242d	(5)
F	4	Control	only WR, DL and RD	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Label Type Number	0 - 32d	(2)
N	3	Separation	0 - 816d	(3)
N	3	Separation Tolerance	8 - 99d	(3)

				(24)

Command (delete and read) / Response (create, modify, delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	242d	(5)
F	4	Control	only WR, DL and RD	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Label Type Number	0 - 32d	(2)

				(18)

Access Code: 243**Function: Standard Label Definition for Service-Counter, Self-Serve and Pre-Pack 1**

Label data for Self-serve Mode, Service Counter Mode and Total Label

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	243d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

N	1	Label Definition Number	0 - 3d	(1)
			0d = Self-serve Label	
			1d = Service Counter Label	
			2d = Total Label	
			3d = Pre-Pack Label	

N	2	Label Type Number	0 - 32d, 0 = no Label	(2)
F	4	Layout Flags	Flag	(4)

Bit	Meaning
0-1	00 ⇒ Left aligned 01 ⇒ Centralised 10 ⇒ Auto format
2-15	Don't care

N	2[4]	TLU font	0 - 20d	(6)
N	2	Ingredients Font	0 - 20d	(6)

N	2	Organis. Name Text No.	0 - 1d, 0d=no Organisation Name Text	(2)
			1 - 15d for L2	

N	2	Advertising Text Number	0 - 1d, 0d=no Advertising Text	(2)
			1 - 15d for L2	

N	2	Packing Date Text No.	0 - 10d, 0d=no Date Text	(2)
---	---	-----------------------	--------------------------	------

N	2	Sell-by Date Text No.	0 - 20d, 0d=no Date Text	(2)
---	---	-----------------------	--------------------------	------

N	2	Use-by Date Text No.	0 - 30d, 0d=no Date Text	(2)
---	---	----------------------	--------------------------	------

F	4	Date flags		(4)
---	---	------------	--	------

Bit	Meaning	Remark
0 - 2	Packing date	see value below
3 - 5	Sell-by Date	see value below
6 - 8	Use-by Date	see value below
9 -15	Don't care	see value below

000 = Do not print date

001 = Print date

010 = Print date with timestamp and year

011 = Print date without year

100 = Print date with timestamp without year

101 = Print offset in days

F 4 Date Strike-Through-Fl. Flag (4)

Bit	Meaning	Value
0	Packing date strike-through	0 = no / 1 = yes
1	Sell-by date strike-through	0 = no / 1 = yes
2	Use-by date strike-through	0 = no / 1 = yes
3 - 15	Don't care	

N 3 Sell-by date offset 0 - 999d (3)

N 3 Use-by date offset 0 - 999d (3)

(53)**Command (read) / Response (create, modify)**

N 1 CMD/RSP 0d/1,3d (1)

N 5 Code 243d (5)

F 4 Control Access | Key | Status (4)

1 – delete not possible

N 4 Department 0 - 9999d (4)

N 2 Scale Number 0 - 64d (2)

N 1 Label Definition Number 0 - 3d (1)

(17)

Access Code: 244

Function: Initiating a Software Download

Sets all Scales of a Network into Software Download Mode

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	244d	(5)
F	4	Control	Don't care	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Response

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	244d	(5)
F	4	Control	Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Access Code: 245

Function: Sleep Mode – Enable / Disable

Sets all Scales of a Network into Sleep Mode

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a 2/a 2/a

Command

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	245d	(5)
F	4	Control	0 - 1d	(4)
			0 = activate	
			1 = deactivate	
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
			-----	(16)

Response

N	1	RSP	1,3d	(1)
N	5	Code	245d	(5)
F	4	Control	Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
			-----	(16)

Access Code: 246**Function: User Configuration – Supplement for Cash Register Applications**

Working with User Configuration Data - (cash register supplement)

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
 2/a 2/a/e 2/a/e

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	246d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
F	4	Scale Configuration 3	Flag	(4)

Bit	Meaning	Value
0	Cash Draw	0: without 1: with
1	Automatic opening of Cash Draw	0: no 1: yes
2	Automatic change computation	0: no 1: yes
3-4	TAF Overflow (TAF = Transaction File)	00: no warning 01 warning 10: warning and print summary 11: warning and print detailed
5	Delete Checkout-Slip when printed	0: no 1: yes
6	Print EAN on Checkout-Slip	0: no 1: yes
7	Print EAN on Collection-Slip	0: no 1: yes
8-15	Don't care	

(20)**Command (delete or read) / Response (create, modify or delete)**

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	246d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

(16)

Access Code: 248**Function: Keyboard Config. - for L2 with Cash Register Appl.**

Working with Keyboard Function Allocation for Cash Register Software

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	248d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	Keyboard Type	0 - 4d 0d = 144 key 2d = 96 key 3d = 83 key 4d = 100 key	(3)
N	3	Fixed keys	0 - 109d	(3)
N	3	Operator keys	2 - 61d	(3)
N	3	Tare keys	0 - 10d	(3)
N	3	Department keys	0 - 16d	(3)
N	4[16]	Department numbers	0 - 9999d	(64)
F	4	Function keys	see Definition	(4)

Definition table for function key allocation

Bit	Meaning	Value	Remark
0	Void Key	0 = no / 1 = yes	
1	Change Key (i.e. money)	0 = no / 1 = yes	
2	Price 2 Key	0 = no / 1 = yes	
3	Don't care	0 = no / 1 = yes	
4	X Key (i.e. multiplication)	0 = no / 1 = yes	
5	Don't care	0 = no / 1 = yes	
6	Minus Key	0 = no / 1 = yes	
7	Plus Key	0 = no / 1 = yes	
8	Don't care	0 = no / 1 = yes	
9	Open Base Price Key	0 = no / 1 = yes	
10 - 15	Don't care		

)* In MIRA scales, these keys are to be programmed as special function keys

N	4[109]	Special Function Keys	(436)
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Definition table for special function key allocation

Decimal value	Meaning	Hex value	Remark
0000 - 0511	Don't care (ASCII char.)	000h - 1FFh	
0512 - 1023	Fixed function keys	200h - 3FFh	
1024 onwards	Programmable function keys	400h onwards	
1024 - 1087	Mark-up / Discount key	400h - 43Fh	
1088 - 1151	Payment Method	440h - 47Fh	
1152 - 1215	Sales Categories	480h - 4BFh	
1216 - 1279	Miscellaneous function keys	4C0h - 4FFh	
1216	Checkout-Slip Key	4C0h	
1217	Collection-Slip Key	4C1h	
1218	Basket key	4C2h	(only MIRA)
1232	Department Key	4D0h	(only MIRA)
1233	Article Group Key	4D1h	(only MIRA)
1536 onwards	PLU fixed Keys	600h onwards	
2048 onwards	Operator keys	800h onwards	
2560 onwards	Tare keys	A00h onwards	

		3072 onwards	Direct Department Keys	C00h onwards	
N	4[109]	Function Keys	see Definition		(436)
N	2	Mark-up / Discount keys	0 - 10d		(2)
N	2	Sales category keys	0 - 10d		(2)
N	2	Payment Method keys	0 - 9d		(2)
N	1	Checkout-Slip key	0 - 1d		(1)
N	1	Collection-Slip key	0 - 1d		(1)

					(543)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	248d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

				(16)

Examples of Values for Function Key Allocation

Decimal value	Function Key
3074	Direct department key (3072) for Department 2 (+2)
1539	Fixed PLU key (1536) Number 3 (+3)
2561	Tare key (2560) Number 1 (+1)
1026	Mark-up / Discount key (1024) Number 2 (+2)

Access Code: 249**Function: Cash Register Takings – for Cash Register Applicat.**

Entering of cash register takings before requesting a cash register report (Acc. Codes 519/520)

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
	2/a							2/a/e		2/a/e			

Command

N	1	CMD	0d	(1)
N	5	Code	249d	(5)
F	4	Control	0d (write only)	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	1	Payment Method Number	0 - 9d	(1)
N	11	Float	(without decimal point)	(11)
N	11	Safe Deposit Value	(without decimal point)	(11)
N	11	Till Deposit	(without decimal point)	(11)
N	11	Till Payout	(without decimal point)	(11)
N	11	Till Balance	(without decimal point)	(11)

				(72)

Response

N	1	RSP	1,3d	(1)
N	5	Code	249d	(5)
F	4	Control	Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

				(16)

Access Code: 250

Function: Receipt Printing – Enable-/Disable

Enable or Disable Cash Register Features

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a/e 2/a/e

Command

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	250d	(5)
F	4	Control	Don't care	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	1	On/Off	0: off, 1: on	(1)

				(17)

Response

N	1	RSP	1,3d	(1)
N	5	Code	250d	(5)
F	4	Control	Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

				(16)

Access Code: 251**Function: Lock-/Unlock Scale - Cash Register Application**

To lock the scale when accessing reports or journals

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
	2/a							2/a/e		2/a/e			

Command

N	1	CMD	0d	(1)
N	5	Code	251d	(5)
N	4	Control	0d	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Lock-/Unlock	0 - 1d	(1)
			0 = <i>unlock</i>	
			1 = <i>lock</i>	
C	20	Text	ASCII Text	(20)
N	2	from Scale Number	0 - 99d	(2)
			0 = <i>lowest scale number</i>	
N	2	to Scale Number	0 - 99d,	(2)
			0 = <i>highest scale number</i>	

(41)**Response**

N	1	RSP	1,3d	(1)
N	5	Code	251d	(5)
F	4	Control	Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

(16)

Access Code: 252**Function: Deletion of Cash Register Sales - Without Deletion Date**

Normally performed after cashing up

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
	2/a							2/a/e		2/a/e			

Command

N	1	CMD	0d	(1)
N	5	Code	252d	(5)
F	4	Control	Sales Level / Sales Type	(4)
			0000 sales level 1	
			0100 sales level 2	
			0200 sales level 3	
			0300 sales level 4	
			0000 = cash register sales	
			0400 = closing Sales revenue	
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

(16)

<i>Note: To automatically record date and time of deletion use Access Code 596</i>
--

Response

N	1	RSP	1,3d	(1)
N	5	Code	252d	(5)
F	4	Control	Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

(16)

Access Code: 253
Function: Additional Article Number

Working with article data - Migros Number

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a				2/a/e	2/a/e	2/a/e	2/a/e			

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	253d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	6	PLU Number	1 - 999999d	(6)
C	12	Additional Article No.	ASCII character	(12)

				(34)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	253d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	1 - 9999d,	(4)
N	2	Scale Number	0d	(2)
N	6	PLU Number	1 - 999999d	(6)

				(22)

Access Code: 255**Function: Deletion of Orders, Checkout-Slips and Collection-Slips**

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
	2/a							2/a/e		2/a/e			

Command

N	1	CMD	0d	(1)
N	5	Code	255d	(5)
F	4	Control	0d (Don't care)	(4)
N	4	Department	0d (Don't care)	(4)
N	2	Scale Number	0d (Don't care)	(2)
N	1	Receipt Type	0 - 2d	(1)
			0 = <i>checkout-Slips</i>	
			1 = <i>collection-Slips</i>	
			2 = <i>crders</i>	

(17)**Response**

N	1	RSP	1,3d	(1)
N	5	Code	255d	(5)
F	4	Control	Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

(16)

Access Code: 256**Function: Receipt Text - Checkout-Slips / Collection-Slips**

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
	2/a							2/a/e		2/a/e			

Command

N	1	CMD	0d	(1)
N	5	Code	256d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Receipt Type	0 - 1d 0 = <i>checkout-slip</i> 1 = <i>collection-slip</i>	(1)
C	20	Text	ASCII character	(20)

				(37)

Response

N	1	RSP	1,3d	(1)
N	5	Code	256d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d,	(4)
N	2	Scale Number	0 - 64d	(2)
N	1	Receipt Type	0 - 1d 0 = <i>checkout-slip</i> 1 = <i>collection-slip</i>	(1)

				(17)

Access Code: 260

Function: Label Types

Working with label types

LL07	LL05	L03	LL27	LM01 2/a	LM02 2/a	LM04 2/a	LM05 2/a/e	LM03 2/a/e	LM25 2/a/e	LM23 2/a/e	LM60 2	LE61 2	LE70 2
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!!! all x- and y- positions and lengths are to be entered in dots !!!

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	260d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Label Definition Number	0 - 3d	(2)
			0: no label	
N	2	Rewind	0 - 80d,	(2)
N	3	Label Width	1 - 192d	(3)
N	3	Label Length	1 - 384d	(3)
N	1	Print Direction	0 - 1d	(1)
			0 = readable	
			1 = reverse	
		Graphic Objects		
N	1[5]	Graphic Object Type	0 - 6d	(5)
			0 = don't print	
			1 = print horizontal line	
			2 = print vertical line	
			3 = print rectangular frame	
			4 = print circle	
			5 = print diagonal	
			6 = print ellipse	
N	3[5]	G. x-Position	1 - 192d	(15)
N	3[5]	G. y-Position	1 - 384d	(15)
N	1[5]	G. Line Thickness	1 - 8d	(5)
N	3[5]	G. Length	1 - 192d or Radius	(15)
N	3[5]	G. Height	0 - 384d, 0 = Line	(15)
N	1[5]	G. Line Style	0d = continuous line	(5)
			1d = dashed line	
		PLU/Ingredients		
N	1	PI Switch	0 = no Text	(1)
			1 = textfield is rectangular	
			2 = textfield with rectangular border, left aligned	
			3 = textfield with rectangular border, right aligned	
			4 = textfield with rectangular border, entire length	
N	2	PI Line Spacing	0 - nnd	(2)
N	1	PI Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	PI x-Position	1 - 192d	(3)
N	3	PI y-Position	1 - 384d	(3)
N	3	PI Field Height	1 - 384d	(3)
N	3	PI Field Width	1 - 192d	(3)
		PLU/Ingredient/Rectangular Border		
N	3	PIR x-Position	1 - 192d	(3)
N	3	PIR y-Position	1 - 384d	(3)
N	3	PIR Field Height	0 - 384d	(3)
N	3	PIR Field Width	0 - 384d	(3)
		Organisation Name Text		
N	1	ONT print direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	ONT x-Position	0 - 192d, 0 = no ONT	(3)
N	3	ONT y-Position	1 - 384d	(3)
N	3	ONT Field Height	1 - 384d	(3)
N	3	ONT Field Width	1 - 192d	(3)

Advertising Text				
N	1	AT Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	AT x-Position	0 - 192d, 0 = no AT	(3)
N	3	AT y-Position	1 - 384d	(3)
N	3	AT Field Height	1 - 384d	(3)
N	3	AT Field Width	1 - 192d	(3)
Miscellaneous Text				
N	2[4]	MT Font Size	0 - 20d, 0 = no MT	(8)
N	1[4]	MT Print Direction	0d=0°, 1d=90°, 3d=270°	(4)
N	3[4]	MT x-Position	1 - 192d	(12)
N	3[4]	MT y-Position	1 - 384d	(12)
C	30[4]	MT Text	ASCII characters	(120)
Dates				
N	2[3]	DA Font Size	0 - 20d, 0 = no Date	(6)
N	1[3]	DA Print Direction	0d=0°, 1d=90°, 3d=270°	(3)
N	3[3]	DA x-Position	0 - 192d	(9)
N	3[3]	DA y-Position	0 - 384d	(9)
<i>x=y=0 = one date after the other</i>				
Date Texts				
N	1[3]	DAT Print Direction	0d=0°, 1d=90°, 3d=270°	(3)
N	3[3]	DAT x-Position	0 - 192d, 0 = no DAT	(9)
N	3[3]	DAT y-Position	1 - 384d	(9)
N	3[3]	DAT Field Height	1 - 384d	(9)
N	3[3]	DAT Field Width	1 - 192d	(9)
Date Strike-Through Fields (X)				
N	1[3]	DAX Print Direction	0d=0°, 1d=90°, 3d=270°	(3)
N	3[3]	DAX x-Pos	1 - 192d, 0=do not cross-out	(9)
N	3[3]	DAX y-Position	1 - 384d	(9)
N	3[3]	DAX Field Height	1 - 384d	(9)
N	3[3]	DAX Field Width	1 - 192d	(9)
EAN Code				
N	2	EAN Code Number	0 - 32d, 0 = no EAN	(2)
N	3	EAN Field Height	1 - 384d	(3)
N	3	EAN Field Width	0d = Standard, 1d = wide	(3)
N	1	EAN Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	EAN x-Position	1 - 192d	(3)
N	3	EAN y-Position	1 - 384d	(3)
Weight				
N	2	Weight Font Size	0 - 20d, 0 = no Weight	(2)
N	1	Weight Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	Weight Value (numeric)	1 - 10d	(2)
N	3	Weight x-Position	1 - 192d	(3)
N	3	Weight y-Position	1 - 384d	(3)
Weight-Unit				
N	2	WU Font Size	0 - 20d, 0 = no Weight Unit	(2)
N	1	WU Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	WU x-Position	1 - 192d	(3)
N	3	WU y-Position	1 - 384d	(3)
C	5	WU Text	ASCII characters	(5)
Base Price				
N	2	BP Font Size	0 - 20d, 0 = no Base Price	(2)
N	1	BP Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	BP Number of Characters	1 - 10d	(2)
N	3	BP x-Position	1 - 192d	(3)
N	3	BP y-Position	1 - 384d	(3)
Base Price Unit				
N	2	BPU font size	0 - 20d, 0 = no Base Price Unit	(2)
N	1	BPU Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	BPU x-Position	1 - 192d	(3)
N	3	BPU y-Position	1 - 384d	(3)
C	8	BPU Currency		(8)
Amount Text				
N	2	AT Font Size	0 - 20d, 0 = no Amount Text	(2)
N	1	AT Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	AT No. of Characters	1 - 10d	(2)
N	3	AT x-Position	1 - 192d	(3)
N	3	AT y-Position	1 - 384d	(3)

Amount Unit				
N	2	AU Font Size	0 - 20d, 0 = no Amount Unit	(2)
N	1	AU Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	AU x-Position	1 - 192d	(3)
N	3	AU y-Position	1 - 384d	(3)
C	5	AU No. of Characters		(5)
Nutri Value				
N	2	NV Font Size	0 - 20d, 0 = no Nutri Value	(2)
N	1	NV Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	NV No. of Characters	1 - 10d	(2)
N	3	NV x-Position	1 - 192d	(3)
N	3	NV y-Position	1 - 384d	(3)
Nutri Value Unit				
N	2	NVU Font Size	0 - 20d, 0 = no NVU	(2)
N	1	NVU Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	3	NVU x-Position	1 - 192d	(3)
N	3	NVU y-Position	1 - 384d	(3)
C	8	NVU No. of Characters	ASCII characters	(8)
PLU Number				
N	2	PLU Font Size	0 - 20d, 0 = no PLU Number	(2)
N	1	PLU Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	PLU No. of Characters	1 - 10d	(2)
N	3	PLU x-Position	1 - 192d	(3)
N	3	PLU y-Position	1 - 384d	(3)
Scale Number				
N	2	Scale Num Font Size	0 - 20d, 0 = no Scale Num	(2)
N	1	Scale Num Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	Scale Num No. of Characters	1 - 10d	(2)
N	3	Scale Num x-Position	1 - 192d	(3)
N	3	Scale Num y-Position	1 - 384d	(3)
Receipt Number				
N	2	Rec Num Font Size	0 - 20d, 0 = no Rec Num	(2)
N	1	Rec Num Print Direction	0d=0°, 1d=90°, 3d=270°	(1)
N	2	Rec Num No. of characters	1 - 10d	(2)
N	3	Rec Num x-Position	1 - 192d	(3)
N	3	Rec Num y-Position	1 - 384d	(3)
Miscellaneous Value				
N	2[4]	MV Font Size	0 - 20d, 0 = no MV	(8)
N	1[4]	MV Print Direction	0d=0°, 1d=90°, 3d=270°	(4)
N	3[4]	MV x-Position	1 - 192d	(12)
N	3[4]	MV y-Position	1 - 384d	(12)
C	10[4]	MV Text	ASCII characters	(40)

				(647)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	260d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Label Definition Number	0 - 3d	(2)

				(18)

Access Code: 261**Function: Keyboard Configuration - Cash Register Application**

Working with Keyboard Function Allocations

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
				2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	261d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	Keyboard Type	0 - 9d	(3)
			4d = T100	
			5d = T79	
			6d = T98	
			7d = T104	
			8d = T82	
			9d = T144	
N	3	Fixed keys	0 - 109d	(3)
N	3	Operator keys	2 - 70d	(3)
N	3	Tare keys	0 - 10d	(3)
N	3	Department keys	0 - 16d	(3)
N	4[16]	Department numbers	0 - 9999d	(64)
F	4	Function keys	see Definition	(4)

Definition table for function key allocation

Bit	Meaning	Value	Remarks
0	Void key	0 = no / 1 = yes	
1	Change Returned key	0 = no / 1 = yes	
2	Price 2 Key (II)	0 = no / 1 = yes	see)*
3	Department Key	0 = no / 1 = yes	see)*
4	X Key (i.e. multiply)	0 = no / 1 = yes	
5	Article Group Key	0 = no / 1 = yes	see)*
6	Minus Key	0 = no / 1 = yes	
7	Plus Key	0 = no / 1 = yes	
8	Basket Key (customer-Nr.)	0 = no / 1 = yes	see)*
9	Open Base Price Key (#)	0 = no / 1 = yes	
10	Prepacking-Mode-Key	0 = no / 1 = yes	see)*
11	Secondary Currency Key	0 = no / 1 = yes	see)*
12	Delivery Note Key	0 = no / 1 = yes	see)*
13	Key for manual weight-value (Wholesale-Key)	0 = no / 1 = yes	see)*
14	EC-Cash Key	0 = no / 1 = yes	see)*
15	Short-Code Key	0 = no / 1 = yes	see)*

)* In MIRA scales, these keys are to be programmed as special function keys

N 4[109] Special Function Keys

(436)

Definition table for special function key allocation

Decimal value	Meaning	Hex value	Remark
0000 - 0511	Don't care (ASCII chars)	000h - 1FFh	
0512 - 1023	Fixed Function Keys	200h - 3FFh	
1024 onwards	Programmable Function Keys	400h onwards	
1024 – 1033	Mark-up / Discount key	400h – 409h	
1088 – 1196	Payment Method key	440h – 448h	
1152 – 1161	Sales Category key	480h – 489h	
1216 – 1279	Miscellaneous function keys	4C0h - 4FFh	
1216	Checkout-Slip key	4C0h	
1217	Collection-Slip key	4C1h	
1218	Basket key	4C2h	(only MIRA)
1219	2 nd Currency Key	4C3h	
1220	Delivery Note key	4C4h	(only MIRA)
1221	Manual weight input (Wholesale Key)	4C5h	(only MIRA)
1222	e cash Key	4C6h	(only MIRA)
1232	Department Key	4D0h	(only MIRA)
1233	Article Group Key	4D1h	(only MIRA)
1234	2 nd Price Key (II)	4D2h	(only MIRA)
1249 – 1258	Direct Text keys	4E1h – 4EAh	
1536 onwards	PLU Fixed keys	600h onwards	
2048 onwards	Operator keys	800h onwards	
2560 onwards	Tare keys	A00h onwards	
3072 onwards	Direct Department keys	C00h onwards	

Please use decimal values for this table

N	2	Mark-up / Discount Keys	0 - 10d (2)
N	2	Don't care	(2)
N	2	Don't care	(2)
N	1	Don't care	(1)
N	1	Don't care	(1)

(543)**Command (delete or read) / Response (create, modify or delete)**

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	261d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

(16)

Access Code: 262**Function: Enabling and Disabling Mark-ups / Discounts / Discounts**

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
				2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	262d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
F	4	User Configuration 3	Flag	(4)

Bit	Meaning	Value	Remarks
0	Mark-up / Discount	0: disabled / 1: enabled	
2-15	Don't care		

(20)**Command (delete or read) / Response (create, modify or delete)**

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	262d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

(16)

Access Code: 266
Function: Scale Circuit Selection (only for Infoline LK05...)

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	266d	(5)
F	4	Control	Access | Key | Status (access is only create/modify -> 0)	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Scale Circuit	0 - 8d 0 = for mixed scale groups, all scale circuits 0 = L2 in pure L2 Network 1 = L2 in mixed network with Infoline or MIRA 4 = only MIRA 9 = only Infoline	(1)

				(17)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	266d	(5)
F	4	Control	Access | Key | Status (Access only read direct -> 2)	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Note:

This Access Code should only be used, when in a network of mixed scale circuits (L2 and MIRA scales) the RS232 data transfer cable is connected to InfoLine.

Infoline then functions as a "shunt" - allowing Access Code 266 to define which scale circuits Access Codes originating from the PC are directed to. This applies to all Access Codes that are common for L2 and MIRA. Access Codes that can be applied to only one Scale Circuit (e.g. a Roving Operator Group purely for L2, Access Code 205) are sent to the corresponding scale circuit only. This setting remains as such until further modified using Access Code 266.

If the data transfer cable is connected to one scale, communication only takes place with the scale circuit of this scale. Communication is not directed to other scale circuits over InfoLine.

Access Code: 267

Function: EAN Codes

Working with EAN Codes

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a 2/a 2/a

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	267d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	2	EAN Code Number	1 - 32d	(2)
N	1	EAN Type	0 - 8d	(1)
C	48	EAN Code	(see EAN Code Details)	(48)

				(67)

EAN Code Details

Legends of EAN Values	Number of characters
C = Check digit	1
N = Running receipt number	4
P = PLU number	4
W = Article Group number	3
A = Article number	4/5
B = Amount	5/6
Q = Quantity	4/5
Q = Weight value from load-cell	4/5
R = Weight value 3 Decimal places	4/5
S = Weight value 2 Decimal places	4/5
T = Weight value 3 Decimal places	4/5
0-9 Digits	12

Possible Placing of EAN Value in a Barcode

EAN Position	Possible Values
1 to 6	0-9, A, W, N, P,
7 or 8	C
8 to 12	B, Q, R, S, T, 0-9
13	C

For EAN128 legend, see L2 Application Handbook 03 (Pre-Pack 2)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	267d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	2	EAN Code Number	1 - 32d	(2)

				(18)

Access Code: 269

Function: Direct Text Number

Working with Article Data – Allocating Direct Texts to PLUs

LL07 2/a	LL05 2/a	L03 2/a	LL27 2/a	LM01	LM02	LM04	LM05 2/a/e	LM03 2/a/e	LM25 2/a/e	LM23 2/a/e	LM60	LE61	LE70
-------------	-------------	------------	-------------	------	------	------	---------------	---------------	---------------	---------------	------	------	------

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	269d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	PLU Number	1 - 999999d	(6)
C	2 [10]	Direct Text	0 - 99d	(20)
		Column Number		

*the line numbers of selected text in
columns 1 to 10 consecutively
(see Note)*

(42)

Note on Direct text Numbers:

Structure of the Direct Text table:

Column	1	2	3	.....	10
Line 0	Text	Text	Text	.....	Text
1	Text	Text	Text	.....	Text
2	Text	Text	Text	.....	Text
3	Text	Text	Text	.....	Text
...	Text	Text	Text	.....	Text
99	Text	Text	Text	.....	Text

Direct Texts are entered into a 10-column table.

Line 0 contains the "heading" of the respective column. 99 different texts can be entered in lines 1 to 99 of each column.

When using Access Code 269 to refer to text in the table, the corresponding line number of the selected text in each of the 10 columns is quoted.

E.g. To refer to the above text in the table highlighted in grey: 029901...03 is quoted

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	269d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	PLU Number	1 - 999999d	(6)
				----- (22)

Access Code: 270

Function: Direct Text Table (Line by Line)

Working with Direct Text - creating Direct Text

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a				2/a/e	2/a/e	2/a/e	2/a/e			

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	270d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0	(4)
N	2	Scale Number	0	(2)
N	2	Line Number	0 - 99d	(2)
C	20 [10]	Direct Text ASCII character		(200)
				<i>the line numbers of selected text in</i>
				<i>columns 1 to 10 consecutively</i>
				<i>(see Code 269)</i>

				(218)

Note on Direct text Numbers:

Structure of the Direct Text Table:

Column	1	2	3	.....	10
Line 0	Text	Text	Text	.....	Text
1	Text	Text	Text	.....	Text
2	Text	Text	Text	.....	Text
3	Text	Text	Text	.....	Text
...	Text	Text	Text	.....	Text
99	Text	Text	Text	.....	Text

Each line contains the text from the 10 columns, at 20 characters per column

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	270d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0	(4)
N	2	Scale Number	0	(2)
N	4	Line Number	0 - 99d	(2)

				(18)

Access Code: 271

Function: Accounts (Account Number)

Working with accounts - Creating an Account Number

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	271d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 999d	(4)
N	2	Scale Number	0 - 64d	(2)
C	20	Account Description	ASCII character alphanumeric	(20)
N	3	Sales Level	0 - Max.-Account (0-100d)	(3)
N	2 [10]	Direct Text Numbers	0 - 99d <i>the line numbers of selected text in columns 1 to 10 consecutively (see Code 269)</i>	(20)
N	1	Direct Text of account or PLU	<i>0 = direct text of account 1 = direct text of PLU</i>	(1)
N	1	Account Status	0 - 2d <i>0 = inactive 1 = active (read only) 2 = pause (read only) - 2 -> account selected but not active - status may be > 0 for only one account !</i>	(1)

(59)

Command (read) / Response (create, modify)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	271d	(5)
F	4	Control	Access | Key | Status read only	(4)
delete see Access Code 273				
N	4	Department	0 - 999d	(4)
N	2	Scale Number	0 - 64d	(2)
C	20	Account Description	ASCII characters alphanumeric	(20)

(36)

Note on Account Description:

When using the command to read accounts and "read equal" (2) is not used, the account description entered is evaluated with the first character of the corresponding alphanumeric character sequence.

Value of Account Description	Accounts Evaluated
000000....	all accounts
100000....	all accounts that begin with ASCII character 1 or higher
500000....	all accounts that begin with ASCII character 5 or higher ⇒ no accounts that begin with a number < 5
A00000....	all accounts that begin with ASCII character A or higher ⇒ no accounts that begin with a number
a00000....	all accounts that begin with ASCII character a or higher ⇒ no accounts that begin with a number or a letter
App000....	all accounts that begin with ASCII character App or higher ⇒ no accounts that begin with a value < App (e.g. Apo)

Access Code: 272

Function: Accounts - Sales Levels

Working with Accounts

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	272d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0	(4)
N	2	Scale Number	0	(2)
N	3	Sales Level	0 - Max.-Account (0-100d)	(1)
C	20	Account Number.	ASCII character alphanumeric	(20)
N	1	Sales Level	0d	(1)
N	2 [10]	Direct Text numbers	0 - 99d	(20)
			<i>the line numbers of selected text in columns 1 to 10 consecutively (see Code 269)</i>	
N	1	Direct Text PLU or Account	description	(1)
			<i>0 = direct text of PLU 1 = direct text of Account</i>	
N	1	Account-Status	0 - 2d	(1)
			<i>0 = inactive 1 = active (read only) 2 = Paused (read only) - 2 -> account selected but not active - status may only be > 0 for one account !</i>	

(60)**Command (delete or read) / Response (create, modify or delete)**

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	272d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0	(4)
N	2	Scale Number	0	(2)
N	3	Sales Level	0 to Maximum-Account (0-100d)	(1)

(17)

Access Code: 273

Function: Deleting Sales Data in an Account

Performed After Final Evaluation of Sales

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a

Command

N	1	CMD	0d	(1)
N	5	Code	273d	(5)
F	4	Control	(4)	
			<i>sales level</i>	
			0000 <i>sales level 1</i>	
			0100 <i>sales level 2</i>	
			0200 <i>sales level 3</i>	
			0300 <i>sales level 4</i>	
			<i>sales type</i>	
			0000 = <i>service counter sales</i>	
			0400 = <i>self-serve sales</i>	
			0800 = <i>pre-pack sales</i>	
			0C00 = <i>inventory value</i>	
N	4	Department	0	(4)
N	2	Scale Number	0	(2)
C	20	Account Number.	ASCII characters alphanumeric	(20)
N	3	Sales Level	0 - Max.-Account (0-100d)	(1)
N		Sales	0 - 1d	(1)
			0 = <i>general sales</i>	
			1 = <i>Special offer article sales</i>	
N	6	Deletion Date	dd / mm / yy (binary)	(3)
N	4	Deletion Time	hh / mm (binary)	(2)
			-----	(43)

Response

N	1	RSP	1,3d	(1)
N	5	Code	273d	(5)
F	4	Control	Status	(4)
N	4	Department	0	(4)
N	2	Scale Number	0	(2)
			-----	(16)

Access Code: 274

Function: Euro Configuration

Working with the Euro Configuration stored in EARAM

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	274d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

N	8	Euro Rate	(read only !)	(8)
---	---	-----------	---------------	------

Notes on EURO rate:

- 8 Positions are possible, including the decimal point

- A maximum of only 6 positions may be non-zero

(E.g. 1,95124 / 0,945671 / 102452)

- examples of valid rates:

Example 1: Country with 1 pre-decimal point position with
Exchange Rate ⇒ 1,00000 ... 1,99999

Example 2: Country with 6 pre-decimal point positions with
Exchange rate ⇒ 100000 ... 999999

- leading zeroes or leading space characters are right aligned

- Decimal point may also be a comma

F	4	Euro Configuration Flag		(4)
---	---	-------------------------	--	------

Bit	Meaning	Value
0-1	Euro Phase	(0..3)
2-4	Receipt attribute	only relevant to phases 1 and 2 0 = Print Total in secondary currency 1 = Print Total and Article Price in secondary currency 2 = Print Total, Article Price and Change Computation in secondary currency
5-7	Label attribute	only relevant to phases 1 and 2 0 = Print amount in Secondary currency 1 = Print amount and Base Price in secondary currency
8	Euro symbol (read only)	Show Euro symbol in MIRA display 0 = Euro symbol off 1 = Euro symbol on
9	Price conversion status (read only)	0 = Prices have not been converted to Euro 1 = Prices have been converted to Euro
10	EAN Attribute	0 = EAN Code in primary currency 1 = EAN Code always in national currency
11 - 15	Don't care	

N	3	Price modification based on Euro/National currency	(3)
---	---	--	------

(write only !)

0 = Do not implement price modification

1 = Implement price modification

(31)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	274d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

				(16)

NOTE: The Euro Configuration only takes effect on scales loaded with software intended for an EU country.

Access Code: 275
Function: Load Printer Logo

Loading a Receipt Logo into the scale

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
 2/a/e 2/a/e 2/a/e 2/a/e

Command (create or modify)

N	1	CMD	0d	(1)
N	5	Code	275d	(5)
F	4	Control	Access | Key | Status <i>write only</i>	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	Line Number	0 - 255d	(3)
C	48	Bit Value	ASCII character	(48)

				(67)

Response (create, modify)

N	1	RSP	1,3d	(1)
N	5	Code	275d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	Line Number	0 - 255d	(3)

				(19)

Access Code: 276

Function: Payment Methods – EU Currencies

Working with Payment Methods (e.g. cash, cheque, card, vouchers, foreign currency etc.)

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a/e 2/a/e

Command (create or modify) / Response (read) for EU CURRENCIES as Methods of Payment

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	276d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Payment Method	1 - 8d, <i>fixed Payment Methods (non-readable)</i> <i>0d = Primary currency</i> <i>9d = Secondary currency</i>	(1)
C	20	Payment Method description	with EU payment, don't care	(20)
C	3	Currency abbreviation	with EU payment, don't care	(3)
N	1	Decimal places	0d	(1)
N	1	Rounding	with EU payment, don't care	(1)
N	11	Factor	with EU payment, don't care	(11)
N	11	Rate	with EU payment, don't care	(11)
F		Configuration Flag		(4)

Bit	Meaning
0	0 = Non EU currency 1 = EU currency
1 - 2	with EURO payment, Don't care 00 = Phase 0 11 = Phase 1 10 = Phase 2 11 = Phase 3
3 - 7	EU currency selection 00000 = BEM Belgium Francs 00001 = DEM Deutsche Mark 00010 = FIM Finland Markkaa 00011 = FRF France Francs 00100 = IEP Ireland Punt 00101 = ITL Italy Lira 00110 = LUF Luxembourg Francs 00111 = NLG Holland (Netherlands) Guilders 01000 = ATS Austria Schillings 01001 = PTE Portugal Escudos 01010 = ESP Spain Pesetes
8 - 15	Don't care

(68)

Example: Flag value for Deutsche Mark

Flag-Value	0	0	0	9
Bit-Value	0 0 0 0	0 0 0 0	0 0 0 0	1 0 0 1
Bit-Nr	15 14 13 12	11 10 09 08	07 06 05 04	03 02 01 00

Flag-Value for Luxembourg Francs

Flag-Value	0	0	3	1
Bit-Value	0 0 0 0	0 0 0 0	0 0 1 1	0 0 0 1
Bit-Nr	15 14 13 12	11 10 09 08	07 06 05 04	03 02 01 00

Command (create or modify) / Response (read) for non EU CURRENCY as Payment Method

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	276d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Payment Method	1 - 8d, <i>fixed payment methods (non-readable)</i> <i>0d = primary currency</i> <i>9d = secondary currency</i>	(1)
C	20	Payment Method description	ASCII character	(20)
C	3	Currency abbreviation	ASCII character	(3)
N	1	Decimal places	0 - 3d	(1)
N	1	Rounding	0 - 1d <i>0d = rounding down to nearest 1</i> <i>1d = rounding down to nearest 5</i>	(1)
N	11	Factor	0 - 99999999999 <i>(without decimal point)</i>	(11)
N	11	Rate	0 - 99999999999 <i>(without decimal point)</i>	(11)
F		Configuration Flag		(4)

Bit	Meaning
0	0 = Non Euro currency 1 = Euro currency
1 – 2	with EURO payment, Don't care 00 = Phase 0 11 = Phase 1 10 = Phase 2 11 = Phase 3
3 – 7	EU currency selection 00000 = BEM Belgium Francs 00001 = DEM Deutsche Mark 00010 = FIM Finland Markkaa 00011 = FRF France Francs 00100 = IEP Ireland Punt 00101 = ITL Italy Lira 00110 = LUF Luxembourg Francs 00111 = NLG Holland (Netherlands) Guilders 01000 = ATS Austria Schillings 01001 = PTE Portugal Escudos 01010 = ESP Spain Pesetes
8 – 15	Don't care

(68)**Command (delete or read) / Response (create, modify or delete)**
for EU and non EU Methods of Payment

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	276d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Payment Method	1 - 8d, <i>fixed payment methods (non-readable)</i> <i>0d = primary currency</i> <i>9d = Secondary currency</i>	(1)

(17)

Access Code: 277

Function: User Configuration – MIRA Specific

Working with user configuration data

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a/e 2/a/e 2/a/e 2/a/e

Command (create or modify) / Response (read)

N 1 CMD/RSP 0d/1,3d (1)
N 5 Code 277d (5)
F 4 Control Access | Key | Status (4)
N 4 Department 0 - 9999d (4)
N 2 Scale Number 0 - 64d (2)

F 4 User config. status. 1 Flag (4)

Bit	Meaning	Value
0	Rounding to nearest 5 of receipt totals	0=off / 1=on
1	Print VAT value on receipt	0=off / 1= on
2	Zero the scale with CODE+C+CODE	0=off / 1= on
3	Reset receipt number with overflow (> 10000; not with change of date)	0=off / 1= on
4	Total receipt with Department Specific Receipt	0=off / 1= on
5	Open cash draw with blank receipt	0=off / 1= on
6	suppress receipt printing (comes to effect only for receipts without weight-articles)	0=off / 1= on
7	booking with price 0	0=off / 1= on
8	booking with open cash-draw	0=off / 1= on
9	printing on LINERLESS-Paper	0=off / 1= on
10	Standard or Optimizes receipt	0= Standard receipt 1= optimized receipt
11	only for LPe (Appl. LE05...) deactivate inactive devices (put on teh NETMAP as inactive device) or activate them automatically (all active devices try continuously te reach the inactive device)	0=deactivate 1=try to activate
12	print direct texts on the receipt	0=off / 1= on
13-15	unused	

N 2 reference column for 0 – 10d (2)
direct-texts on the receipt

N 2 Don't care (2)

F 4[6] User configuration status 3 to 8 Flag (24)

Bit	Meaning	Value
0-15	Don't care	

These 6 additional flag values are currently reserved for possible future use

(48)

Command (delete or read) / Response (create, modify or delete)

N 1 CMD/RSP 0d/1,3d (1)
N 5 Code 277d (5)
F 4 Control Access | Key | Status (4)
N 4 Department 0 - 9999d (4)
N 2 Scale Number 0 - 64d (2)

(16)

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03 2/a/e	LM25	LM23 2/a/e	LM60	LE61	LE70
------	------	-----	------	------	------	------	------	---------------	------	---------------	------	------	------

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	278d	(5)
F	4	Control	Access Key Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2 [4]	Date/Time	hh / dd / mm / yy	(8)
N	5	Delivery ID	1 – 99999d	(5)
N	4	PLU Department Number	1 – 9999d	(4)
N	6	PLU Number	1 – 999999d	(6)
C	20	PLU description	ASCII character	(20)
N	11	Amount	+/- 0 – 9999999d	(11)
N	5	Weight/Quantity	0 – 99999d (g, Pieces)	(5)
F	4	Flag	(4)	

Bit	Meaning	Value
0	Weight or non-weight PLU	0 = Weight / 1 = non-weight
1 – 15	Don't care	0=off / 1=on

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	278d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2 [4]	Date/Time	hh / dd / mm / yy	(8)
N	5	Delivery ID	1 – 99999d	(5)
N	4	PLU Department Number	1 – 9999d	(4)
N	6	PLU Number	1 – 999999d	(6)

				(39)

Access Code: 279

Function: Scale Configuration – MIRA Specific

Working with Scale Configuration

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a 2/a 2/a/e 2/a/e 2/a/e 2/a/e

!!! To activate Access Code 279, use Access Code 201 after using this code (Scale Config.) !!!

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	279d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

N	4	No. of deliv. note customers	0 - 2000d	(4)
---	---	------------------------------	-----------	------

N	4	No. of deliv. note entries	0 - 4500d	(4)
---	---	----------------------------	-----------	------

F	4	Scale configuration	Flag	(4)
---	---	---------------------	------	------

Flag 3

Bit	Meaning	Value
0	Hand-scanner on Channel A	0=off / 1=on
1-15	Don't care	

N	4	Ingredients Text length	0 – 900d	(4)
---	---	-------------------------	----------	------

N	3	Direct Text Lines	0 – 100d	(3)
---	---	-------------------	----------	------

N	2	Direct Text Columns	0 – 10d	(2)
---	---	---------------------	---------	------

N	2	Direct Text Long Lines	0 – 100d	(2)
---	---	------------------------	----------	------

N	3	No. of Shortcodes	0 – 100d	(3)
---	---	-------------------	----------	------

*only with LM05, LM25, LF05, LF25
LE05, LF03, LF23
not with LM03 und LM23*

N	2	Don't care		(2)
---	---	------------	--	------

F	4	Scale configuration	Flag	(4)
---	---	---------------------	------	------

Flags 7 to 8

Bit	Meaning	Value
0-15	Don't care	

These 2 additional flag values are currently reserved for future use

(48)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
---	---	---------	---------	------

N	5	Code	279d	(5)
---	---	------	------	------

F	4	Control	Access | Key | Status	(4)
---	---	---------	-----------------------	------

N	4	Department	0 - 9999d	(4)
---	---	------------	-----------	------

N	2	Scale Number	0 - 64d	(2)
---	---	--------------	---------	------

(16)

Access Code: 280

Function: Delivery Note Customer Data

Working with Customer Data for Delivery Notes

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a/e 2/a/e

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	280d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
C	13	Customer Number		(13)
C	100	Customer Text		(100)
C	100	Header		(100)
C	100	Footer		(100)
C	1	Mark-up / Discount number	0 – 9d	(1)
C	1	Number of copies	0 – 9d	(1)
F	4	Configuration Flag	(4)	

Bit	Meaning	Value
0	Don't care	
1	Print prices and amounts	0 = off / 1 = on
2	Leave space for signature	0 = off / 1 = on
3	list closed delivery notes in the cash register sales report	0 = list 1 = don't list
4 – 15	Don't care	

(335)**Command (delete or read) / Response (create, modify or delete)**

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	280d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
C	13	Customer Number		(13)

(29)

Access Code: 283

Function: Configuration of E-Cash Card Reader

Configuring the COM Port for an E-Cash Card Reader

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a/e 2/a/e

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	283d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Card Reader Manufacturer	0 – 255d <i>0d = Giesecke & Devrient</i> <i>1d = Wellcom</i> <i>2d - 255d free</i>	(3)
N	6	Card Reader password	0 - 999999d	(6)
F	4	Configuration Flag	(4)	

Bit	Meaning	Value
0	Cancellation of authorization by cash register	0 = Disabled 1 = Enabled
1 – 15	Don't care	

N	5	Cash Register Number	0 - 65536d	(5)
N	3	don't care		(3)
F	4	Reserve Flag		(4)

Bit	Meaning	Value
0-15	don't care	

N	5 [5]	Reserve	0 - 65536d	(25)

				(66)

Command (read) / Response (create, modify)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	283d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

(16)

Access Code: 285**Function: Keyboard configuration LP (additional direct-text-keys)**

assignment from direct-text columns to the direct-text-keys

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
							2/a/e	2/a/e	2/a/e	2/a/e			

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	285d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	keyboard-type	0-9d	(3)
			4d = T100	
			5d = T79	
			6d = T98	
			7d = T104	
			8d = T82	
			9d = T144	
N	2	No. of Direkt-Text-Keys	0 - 10d	(2)
N	2	DT-Column DT-key 01	0 - 99d	(2)
N	2	DT-Column DT-key 02	0 - 99d	(2)
N	2	DT-Column DT-key 03	0 - 99d	(2)
N	2	DT-Column DT-key 04	0 - 99d	(2)
N	2	DT-Column DT-key 05	0 - 99d	(2)
N	2	DT-Column DT-key 06	0 - 99d	(2)
N	2	DT-Column DT-key 07	0 - 99d	(2)
N	2	DT-Column DT-key 08	0 - 99d	(2)
N	2	DT-Column DT-key 09	0 - 99d	(2)
N	2	DT-Column DT-key 10	0 - 99d	(2)
N	2	don't care	0d	(2)
N	2 [10]	don't care	0d	(20)
N	2	don't care	0d	(2)
N	2 [10]	don't care	0d	(20)
N	2	don't care	0d	(2)
N	4 [10]	don't care	0d	(40)
N	3	don't care	0d	(3)
N	3	don't care	0d	(3)
N	3	don't care	0d	(3)
N	3	don't care	0d	(3)
F	4	Flag	0d ⇒ look at the Definitiontable	(4)

Definitionstabelle zum Flag

Bit	Meaning	Value	comment
0 – 15	don't care		

(143)**Command (delete or read) / Response (create, modify or delete)**

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Kennung	285d	(5)
F	4	Steuerung	Access | Key | Status	(4)
N	4	Abteilung	0 - 9999d	(4)
N	2	Geräte-Nr.	0 - 64d	(2)

(16)

Access Code: 287

Function: Shortcode Data

Create the Shortcode-Datas (No, Text, Directtext assignment, Quantity)

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
							2/a/e	2/a/e	2/a/e	2/a/e	not for	LM03	LM23

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	287d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale-Number	0d	(2)
N	3	Shortcode-No.	0 – 100d	(3)
C	20	Shortcode-Text		(20)
N	2	Direct-Text Line No.	0 – 99d	(2)
		for Direct-Text Column 1		
N	2	Direct-Text Line No.	0 – 99d	(2)
		for Direct-Text Column 2		
N	2	Direct-Text Line No.	0 – 99d	(2)
		for Direct-Text Column 3		
N	2	Direct-Text Line No.	0 – 99d	(2)
		for Direct-Text Column 4		
N	2	Direct-Text Line No.	0 – 99d	(2)
		for Direct-Text Column 5		
N	2	Direct-Text Line No.	0 – 99d	(2)
		for Direct-Text Column 6		
N	2	Direct-Text Line No.	0 – 99d	(2)
		for Direct-Text Column 7		
N	2	Direct-Text Line No.	0 – 99d	(2)
		for Direct-Text Column 8		
N	2	Direct-Text Line No.	0 – 99d	(2)
		for Direct-Text Column 9		
N	2	Direct-Text Line No.	0 – 99d	(2)
		for Direct-Text Column 10		
N	7	supplied weight	0 – 9999999d	(7)
			<i>without decimal point</i>	
N	7	supplied No. of units	0 – 9999999d	(7)

				(73)

further details for Directtext-Line-Number see at Access Code 269

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	287d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale No.	0d	(2)
N	3	Shortcode-Nr	0 – 100d	(3)

				(19)

Access Code: 288

Function: Shortcode Assignment for a PLU

Shortcode-assignment for an article (PLU)

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a/e 2/a/e 2/a/e 2/a/e not for LM03 LM23

Command (create or modify) / Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	288d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale-Number	0d	(2)
N	3	PLU-Number	1 – 999999d	(6)
N	3	Shortcode-Number	0 – 127d	(3)
			0 ⇒ all permissible	
			1–100 ⇒ PLU permitted to book only with Shortcode	
			101 ⇒ PLU permitted to book only with Direct-Texts	
			102 ⇒ PLU permitted to book only with Shortcode	
			Shortcode not yet distinct	
			103 ⇒ no Direct-Text an no Shortcode	
F	4	Don't care		(4)

				(29)

Command (delete or read) / Response (create, modify or delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	288d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale-Number	0d	(2)
N	3	PLU-Number	1 – 999999d	(6)

				(22)

Access Code: 289

Function: Shortcode sales datas

read / delete the sales-datas for the Shortcode-Numbers

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05 2/a/e	LM03 2/a/e	LM25 2/a/e	LM23 2/a/e	LM60 not for	LE61 LM03	LE70 LM23
------	------	-----	------	------	------	------	---------------	---------------	---------------	---------------	-----------------	--------------	--------------

Response (read)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	289d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale-Number	0d	(2)
N	3	Shortcode-No.	0 – 100d	(3)
N	7	weight	0 – 9999999d <i>without decimal point</i>	(7)
N	7	No. of units	0 – 9999999d	(7)
N	2[3]	Date first booking	dd/mm/yy	(6)
N	2[2]	time first booking	hh/mm	(4)
N	2[3]	Date last booking	dd/mm/yy	(6)
N	2[2]	time last booking	hh/mm	(4)

				(53)

Command (delete or read) / Response (delete)

N	1	CMD/RSP	0d/1,3d	(1)
N	5	Code	289d	(5)
F	4	Control	Access | Key | Status <i>read odr delete only</i>	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale-Number	0d	(2)
N	3	Shortcode-No.	0 – 100d	(3)

				(19)

IV-C Individual Sales - Access Codes 4XX

Definition of Access Control for Selective Sales Querying

The command part (i.e. command message) of this Access Code allows the access type, key, sales level and sales type to be specified in its Control Field. The response part (i.e. the response message from the scale) contains the updated status in its Control Field.

Access type	Meaning	Description
__ _ 2	read equal	read the given record
__ _ 3	read greater or equal	read the given record or next highest
__ _ 4	read less or equal	read the given record or next lowest
__ _ 5	read greater	read the next highest record
__ _ 6	read less	read the next lowest record

Key	Meaning	Description
__ _ 0 _	Primary key	first field after the scale number
__ _ 1 _	Secondary key 1	second field after the scale number
__ _ 2 _	Secondary key 2	third field after the scale number
__ _ 3 _	Secondary key 3	fourth field after the scale number
__ _ 4 _	only PLU/Article Group with sales	for Access Codes 406, 408
__ _ 8 _	only PLUs on special offer	for Access Code 408 (Special Offers)

Data Server	Meaning	Description
_ 0 _ _	Sales level 1	
_ 1 _ _	Sales level 2	
_ 2 _ _	Sales level 3	only for L2
_ 3 _ _	Sales level 4	only for L2
_ 0 _ _	Sales type	Service counter or cash register sales
_ 4 _ _	Sales type	Self-serve sales or Cash register Sales
_ 8 _ _	Sales type	Pre-Pack sales
_ C _ _	Sales type	Inventory sales

To combine Sales Levels and Sales Types, the corresponding values are to be added in hexadecimal format.
E.g. Pre-Pack sales for sales level 3 has the value of ⇨ "A"

Status	Meaning	Description
0 _ _ _	OK	
1 _ _ _	file not created	
2 _ _ _	no free record	
3 _ _ _	file corrupt	
4 _ _ _	not found	record not found
5 _ _ _	wrong key	
6 _ _ _	double key	several records exist with the same Key
C _ _ _	(12) bad parameter	
D _ _ _	(13) general error	
E _ _ _	(14) undefined command	
F _ _ _	(15) not executable	

Access Code: 400
Function: Store Sales

Request Sales Report for a Particular Store

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	400d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Response

N	1	RSP	1,3d	(1)
N	5	Code	400d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales by Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2
N	11	Number of Customers		(11)

				(71)

Access Code: 401
Function: Department Sales

Request Sales Report for a Particular Department

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	401d	(5)
F	4	Control	see Definition	(4)
			<i>only 0002 (read equal)</i>	
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)

				(16)

Response

N	1	RSP	1,3d	(1)
N	5	Code	401d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	No. of Entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2
N	11	Number of Customers		(11)
N	11	SO Sales Revenue	(without decimal point)	(11)
N	11	SO Sales in Weight	(g)	(11)
N	11	SO No. of Entries		(11)
N	11	SO Margin	(without decimal point)	(11)

				(115)

Access Code: 402
Function: Default Department Sales

Request Default Department Sales

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a										

Command

N	1	CMD	0d	(1)
N	5	Code	402d	(5)
F	4	Control	see Definition	(4)
			<i>only 0002 (read direct)</i>	
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Default Department No. 1 - 9999d		(4)
			-----	(20)

Response

N	1	RSP	1,3d	(1)
N	5	Code	402d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Default Department No. 1 - 9999d		(4)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11)
N	11	Number of Customers		(11)
			-----	(75)

Access Code: 403
Function: Scale Sales

Request Scale Sales

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	403d	(5)
F	4	Control	see Definition only 0002 (read direct) or 0007 (read all)	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)

				(16)

Response

N	1	RSP	1,3d	(1)
N	5	Code	403d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2
N	11	Number of Customers		(11)

				(71)

Access Code: 404

Function: Operator Sales

Request Operator Sales

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	404d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Operator Number	1 - 99d (100=Self-serve; 101=Pre-Pack)	(2)

				(18)

Response

N	1	RSP	1,3d	(1)
N	5	Code	404d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	Operator Number	1 - 99d, (100=Self-serve; 101=Pre-Pack)	(2)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2
N	11	Number of Customers		(11)
N	11	Cancellation1 (Amount)	(without decimal point)	(11)
N	5	Number of Cancellation1		(5)
N	11	Cancellation2 (Amount)	(without decimal point)	(11)
N	5	Number of Cancellation2		(5)
N	5	Number of Blank Receipts		(5)
N	11	Sales Green	(without decimal point)	(11) only for L2
N	11	Sales Yellow	(without decimal point)	(11) only for L2
N	11	Sales Red	(without decimal point)	(11) only for L2
N	11	SO Sales Revenue	(without decimal point)	(11)
N	11	SO Sales by Weight	(g)	(11)
N	11	SO No. of Entries		(11)
N	11	SO Margin	(without decimal point)	(11)
N	11[10]	Mark-up / Discount	(without decimal point)	(110)

				(297)

Access Code: 405
Function: Time Based Sales

Request Time Based Sales

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	405d	(5)
F	4	Control	see Definition	(4)
			<i>only 0002 (read direct)</i>	
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	2	Time of Day	0 - 24d	(2)
			0 ⇒ no hourly sales	
			1 ⇒ 0 - 1 Hrs	
			2 ⇒ 1 - 2 Hrs	
			
			24 ⇒ 23 - 24 Hrs	
N	1	Day of the Week	0 - 7d	(1)
			0 = no daily sales	
			1 = Monday to 7 = Sunday	

				(19)

Response

N	1	RSP	1,3d	(1)
N	5	Code	405d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	2	Time of day	0 - 24d	(2)
N	1	Day of the week	0 - 7d	(1)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Number of Customers		(11)

				(63)

Access Code: 406
Function: Article Group Sales

Request Article Group Sales

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	406d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	4	Article Group Number	1 - 9999d	(4)
N	1	Sales Type	0 - 4d	(1)
			0 ⇒ <i>PLU share</i>	
			1 ⇒ <i>Hand+ share</i>	
			2 ⇒ <i>Hand- share</i>	
			3 ⇒ <i>Miscellaneous - share</i>	

(21)

Response

N	1	RSP	1,3d	(1)
N	5	Code	406d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	4	Article Group Number	1 - 9999d	(4)
N	1	Sales Type	0 - 4d (see Definition)	(1)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2

(65)

Access Code: 407
Function: Main Article Group Sales

Request Main Article Group Sales

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
 2/a 2/a 2/a 2/a

Command

N	1	CMD	0d	(1)
N	5	Code	407d	(5)
F	4	Control	see Definition	(4)
			<i>only 0002 (read direct)</i>	
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	4	Main Article Group Number	1 - 9999d	(4)
			-----	(20)

Response

N	1	RSP	1,3d	(1)
N	5	Code	407d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	4	Main Article Group Number	1 - 9999d	(4)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of entries		(11)
N	11	Margin	(without decimal point)	(11)
			-----	(64)

Access Code: 408
Function: Article Sales

Request Article Sales

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	408d	(5)
F	4	Control	see Definition	(4)
			<i>additional __4_ (only PLU/AG with sales)</i>	
			<i>additional __8_ (only PLUs on special offer)</i>	
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	6	PLU Number	1 - 999999d	(6)
C	13	EAN Number	ASCII numbers	(13)
C	10	Article Description	ASCII characters	(10)

				(45)

Response

N	1	RSP	1,3d	(1)
N	5	Code	408d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	6	PLU Number	1 - 999999d	(6)
C	13	EAN Number	ASCII numbers	(13)
C	20	Article description	ASCII character	(20)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight (g)		(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2
N	11	Remainder	(g, pieces)	(11)

				(110)

Access Code: 409
Function: Mark-up / Discount Sales

Request Mark-up / Discount Sales

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
	2/a				2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e		2	2

Command

N	1	CMD	0d	(1)
N	5	Code	409d	(5)
F	4	Control	see Definition	(4)
			<i>only 0002 (read direct)</i>	
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Mark-up / Discount Number	0 - 9d	(1)
			-----	(17)

Response

N	1	RSP	1,3d	(1)
N	5	Code	409d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Mark-up / Discount Number	0 - 9d	(1)
N	11[2]	Mark-up / Discount Sales Rev.	(without decimal point)	(22)
N	11[2]	Number of entries		(22)
			-----	(61)

Access Code: 410
Function: Sales Category Sales

Request Sales Based on Sales Category

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
	2/a							2/a/e		2/a/e			

Command

N	1	CMD	0d	(1)
N	5	Code	410d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Sales Category Number 0 - 9d		(1)

				(17)

Response

N	1	RSP	1,3d	(1)
N	5	Code	410d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Sales Category Number 0 - 9d		(1)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Number of Receipts		(11)

				(39)

Access Code: 411
Function: VAT Sales

Request Sales Report on a Particular VAT Rate

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	411d	(5)
F	4	Control	see Definition	(4)
			<i>only 0002 (read direct)</i>	
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	VAT Number	0 - 15d	(2)

				(18)

Response

N	1	RSP	1,3d	(1)
N	5	Code	411d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	VAT Number	0 - 15d	(2)
N	11	Total Sales	(without decimal point)	(11)

				(29)

Access Code: 412

Function: Special Offer Sales

Request Special Offer Sales

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	412d	(5)
F	4	Control	see Definition	(4)
			<i>only 0002 (read direct)</i>	
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Special Offer Number	1 - 9999d	(4)
N	4	Department	1 - 9999d	(4)
N	6	PLU Number	1 - 999999d	(6)

				(30)

Response

N	1	RSP	1,3d	(1)
N	5	Code	412d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	Special Offer number	1 - 9999d	(4)
N	4	Department	1 - 9999d	(4)
N	6	PLU Number	1 - 999999d	(6)
N	8[2]	Special Offer Price	+/- 0-999999(9)d	(16)
N	8[2]	Selling Price	+/- 0-999999(9)d	(16)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of entries		(11)
N	11	Margin	(without decimal point)	(11)

				(106)

IV-D Sales Reports - Access Codes 5XX

Definition of Access Control for the Requesting of Sales Reports

The command part (i.e. command message) of this Access Code allows the report type, output format, sales level and sales type to be specified in its Control Field. The response part (i.e. the response message from the scale) contains the updated status in its Control Field.

Access type	Meaning
__ _ 6	write to channel Release sales report to interface

Key	Meaning
__ 4 _	only PLU/Article Group for Access Codes 504, 505 with sales
__ 8 _	only Special Offer PLU for Access Code 505 (Special Offers)

Data Server	Meaning
_ 0 _ _	Sales level 1
_ 1 _ _	Sales level 2
_ 2 _ _	Sales level 3 only for L2
_ 3 _ _	Sales level 4 only for L2
_ 0 _ _	Sales type Service counter or cash register sales
_ 4 _ _	Sales type Self-Serve sales or cash register sales
_ 8 _ _	Sales type Pre-Pack Sales
_ C _ _	Sales type Inventory Value

To combine Sales Levels and Sales Types, the corresponding values are to be added in hexadecimal format.
E.g. Pre-Pack sales for sales level 3 has the value of ⇒ "A"

Status	Meaning
0 _ _ _	OK
1 _ _ _	report cancelled

Access Code: 500

Function: Operator & Scale Complete

Presentation of Operator and Scale Sales According to Department

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	1	Short/Long report	0d = Short report 1d = long report	(1) only for L2

(17)

Response (Multi-block, for unformatted output)

Operator Sales

N	1	RSP	1,3d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d=Operator sales	(3)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2
N	11	No. of Customers		(11)
N	11	Cancellation1 (Amount)	(without decimal point)	(11)
N	5	Number of Cancellation1		(5)
N	11	Cancellation2 (Amount)	(without decimal point)	(11)
N	5	Number of Cancellation2		(5)
N	5	Number of Blank Receipts		(5)

(113)

Operator Sales (additional)

N	1	RSP	1,3d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	1d=Operator Sales (additional)	(3)
N(C)	2	Operator Number	1 - 99d, 'Self-serve', 'Pre-Pack'	(2)
N	11	Sales Green	(without decimal point)	(11) only for L2
N	11	Sales Yellow	(without decimal point)	(11) only for L2
N	11	Sales Red	(without decimal point)	(11) only for L2
N	11	Special Offer Sales Revenue	without decimal point)	(11)
N	11	Special Offer Sales by Weight	(g)	(11)
N	11	Special Offer Number of Entries		(11)
N	11	Special Offer Margin	(without decimal point)	(11) only for L2

(98)

Total Operator Sales

N	1	RSP	1,3d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	2d = Sum of Operator Sales	(3)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2
N	11	Number of Customers		(11)

(74)*Specific Values**only for L2*

N	1	RSP	1,3d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	3d = Specific Values	(3)
N	11	Sales/Customer	(without decimal point)	(11)
N	11	Entries/Customer		(11)
N	11	Margin/Customer	(without decimal point)	(11)

(52)*Scale Sales*

N	1	RSP	1,3d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)

N	3	Record Type	4d = Scale Sales	(3)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2
N	11	Number of Customers		(11)

(74)*Total Scale Sales*

N	1	RSP	1,3d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)

N	3	Record-Type	5d = Total Scale Sales	(3)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2
N	11	Number of Customers		(11)

(74)

VAT

N	1	RSP	1,3d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	6d = VAT	(3)
N	2	VAT number	0 -15d	(2)
N	11	Sales Revenue	(without decimal point)	(11)

(32)*Mark-up / Discount*

N	1	RSP	1,3d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record-Type	7d = Mark-up / Discount	(3)
N	1	Mark-up / Discount number	0 - 9d	(1)
N	11[2]	Mark-up / Discount sales (without decimal point)		(22)
N	11[2]	Number of Entries		(22)

(64)*Sales category*

N	1	RSP	1,3d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	8d = Sales category	(3)
N	1	Sales category number	0 - 9d	(1)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Number of Receipts		(11)

(42)*Checkout-Slips*

N	1	RSP	1,3d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	9d = Checkout-Slips	(3)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Number of Entries		(11)
N	11	Number of Customers		(11)

(52)

Orders

N	1	RSP	1,3d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record-Type	10d = Order	(3)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Number of Entries		(11)
N	11	Number of Customers		(11)

(52)*End*

N	1	RSP	1,3d	(1)
N	5	Code	500d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	255d = End Of Report	(3)
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(19)

Access Code: 501
Function: Main Department

Presentation of Main Department Sales According to Default Department

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
 2/a 2/a 2/a 2/a

Command

N	1	CMD	0d	(1)
N	5	Code	501d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	from Default Dept. No.	0 - 9999d <i>0=lowest Default Department</i>	(4)
N	4	to Default Dept. No.	0 - 9999d <i>0=highest Default Department</i>	(4)

				(24)

Response (Multi-block, for unformatted output)

Default Department

N	1	RSP	1,3d	(1)
N	5	Code	501d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record-Type	0d=Default Department	(3)
N	4	Default Department number.	1 - 9999d	(4)
C	20	Default Department descript.	ASCII character	(20)

				(43)

Default Department Sales

N	1	RSP	1,3d	(1)
N	5	Code	501d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale number	0d	(2)
N	3	Record-Type	1d=Default Department Sales	(3)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales by Weight	(g)	(11)
N	11	Number of Entries	(11)	(11)
N	11	Margin	(without decimal point)	(11)
N	11	Customers		(11)

				(74)

Specific Values

N	1	RSP	1,3d	(1)
N	5	Code	501d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	2d = Specific Values	(3)
N	11	Sales/Customer	(without decimal point)	(11)
N	11	Entries/Customer		(11)
N	11	Margin/Customer	(without decimal point)	(11)

(52)*End*

N	1	RSP	1,3d	(1)
N	5	Code	501d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	255d = End Of Report	(3)
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(19)

Access Code: 502
Function: Department

Presentation of Department Sales According to Department

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	502d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	from Department Number	0 - 9999d <i>0 = lowest Department</i>	(4)
N	4	to Department Number	0 - 9999d <i>0 = highest Department</i>	(4)

				(24)

Response (Multi-block, for unformatted output)

Department

N	1	RSP	1,3d	(1)
N	5	Code	502d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = Department	(3)
N	4	Department Number	1 - 9999d	(4)
C	20	Department Description	ASCII character	(20)

				(43)

Department Sales

N	1	RSP	1,3d	(1)
N	5	Code	502d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	1d=Department Sales	(3)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales by Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2
N	11	Customers		(11)
N	11	Special Offer Sales Revenue	(without decimal point)	(11)
N	11	Special Offer Sales in weight	(g)	(11)
N	11	Special Offer Number of Entries		(11)
N	11	Special Offer Margin	(without decimal point)	(11) only for L2

				(118)

<i>Specific Values</i>				<i>only for L2</i>
N	1	RSP	1,3d	(1)
N	5	Code	502d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	2d = Specific Values	(3)
N	3	Special Offer Sales /Sales*100 (in %)		(3)
N	11	Sales/Customer	(without decimal point)	(11)
N	11	Entries/Customer		(11)
N	11	Margin/Customer	(without decimal point)	(11)

<i>End</i>				(55)
N	1	RSP	1,3d	(1)
N	5	Code	502d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	255d = End Of Report	(3)

				(19)

Access Code: 503

Function: Main Article Groups

Presentation of Main Article Group Sales according to Main Article Groups.

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a 2/a 2/a

Command

N	1	CMD	0d	(1)
N	5	Code	503d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
			<i>0 = all departments</i>	
N	2	Scale Number	0d	(2)
N	4	from Main Article Group number		0 - 9999d (4)
			<i>0 = lowest Main Article Group number</i>	
N	4	to Main Article Group Number		0 - 9999d (4)
			<i>0 = highest Main Article Group number</i>	

				(24)

Response (Multi-block, for unformatted output)

Main Article Group

N	1	RSP	1,3d	(1)
N	5	Code	503d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = Main Article Group	(3)
N	4	Main Article Group Number	1 - 9999d	(4)
C	20	Main Article Group Description	ASCII character	(20)

				(43)

Main Article Group Sales

N	1	RSP	1,3d	(1)
N	5	Code	503d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	1d=Main Article Group Sales	(3)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales by Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11)

				(63)

Specific Values

N	1	RSP	1,3d	(1)
N	5	Code	503d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)

N	3	Record-Type	2d = Specific Values	(3)
N	11	Average Selling Price	+/- 0-999999d	(11)
N	11	Sales/Entries	(without decimal point)	(11)
N	11	Margin/Entries	(without decimal point)	(11)

(52)*End*

N	1	RSP	1,3d	(1)
N	5	Code	503d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	255d = End Of Report	(3)
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(19)

Access Code: 504
Function: Article Groups

Article Group Sales Report According to Article Groups

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	504d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
			0 = all Departments	
N	2	Scale Number	0d	(2)
N	4	from Article Group Number	0 - 9999d	(4)
			0 = lowest article group number	
N	4	to Article group Number	0 - 9999d	(4)
			0 = article group number	

				(24)

Response (Multi-block, for unformatted output)

<i>Article Group</i>				
N	1	RSP	1,3d	(1)
N	5	Code	504d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d (0: 'dump')	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = Article group	(3)
N	4	Article Group Number	1 - 9999d, 0: dump	(4)
C	20	Article Group Description	ASCII character	(20)

				(43)
<i>Article group Sales</i>				
N	1	RSP	1,3d	(1)
N	5	Code	504d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	1d = Article group sales	(3)
N	1	Sales Type	0 - 4d	(1)
			0 = PLU share	
			1 = Hand+ share	
			2 = Hand- share	
			3 = Miscellaneous share	
			4 = Total Article Groups	
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales by Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2

				(64)

<i>Specific Values</i>				<i>only for L2</i>
N	1	RSP	1,3d	(1)
N	5	Code	504d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	2d = Specific Values	(3)
N	11	Average Selling Price	+/- 0-999999d	(11)
N	11	Sales/Entries	(without decimal point)	(11)
N	11	Margin/Entries	(without decimal point)	(11)

<i>End</i>				(52)
N	1	RSP	1,3d	(1)
N	5	Code	504d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	255d = End Of Report	(3)

				(19)

Access Code: 505

Function: Article

Article Sales Report According to PLU or EAN

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	505d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
			0 = all departments	
N	2	Scale Number	0d	(2)
N	1	Short/Long report	0 - 1d	(1) only for L2
			<i>0d = Short report</i>	
			<i>1d = Long report</i>	
N	1	PLU/EAN	0 - 1d	(1) only for L2
			<i>0d = PLU</i>	
			<i>1d = EAN</i>	
N	6	from PLU Number	0 - 999999d	(6)
			<i>0 = lowest PLU number</i>	
C	13	from EAN Number	ASCII numbers	(13) only for L2
			<i>13 x '0' = lowest EAN number</i>	
N	6	to PLU Number	0 - 999999d	(6)
			<i>0 = highest PLU number</i>	
C	13	to EAN Number	ASCII numbers	(13) only for L2
			<i>13 x '0' = highest EAN number</i>	

(56)**Response (Multi-block, for unformatted output)**

Department

N	1	RSP	1,3d	(1)
N	5	Code	505d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = Department	(3)
N	4	Department	1 - 9999d	(4)
C	20	Department description	ASCII character	(20)

(43)

Article

N	1	RSP	1,3d	(1)
N	5	Code	505d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	1d = Article	(3)
N	6	PLU Number	1 - 999999d	(6)
C	13	EAN Number	ASCII numbers	(13)
C	20	Article Description	ASCII character	(20)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11) only for L2

(102)

<i>Specific Values (only for Long report)</i>				<i>only for L2</i>
N	1	RSP	1,3d	(1)
N	5	Code	505d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	2d = Specific Values	(3)
N	11	Average Selling Price	+/- 0-999999d	(11)
N	11	Sales/Entries	(without decimal point)	(11)
N	11	Margin/Entries	(without decimal point)	(11)

<i>Hand + / - / Miscellaneous</i>				(52)
N	1	RSP	1,3d	(1)
N	5	Code	505d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	3d = Hand + / - / M.	(3)
N	1	Sales Type	1 - 3d	(1)
1 = hand+ share				
2 = hand- share				
3 = miscellaneous - share /				
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales by Weight	(g)	(11)
N	11	Number of Entries	(11)	
N	11	Margin	(without decimal point)	(11) only for L2

<i>End</i>				(64)
N	1	RSP	1,3d	(1)
N	5	Code	505d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	255d = End Of Report	(3)

				(19)

Access Code: 506

Function: Best Selling Articles

Listing of article sales that achieve or exceed a given upper limit

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a 2/a 2/a

Command

N	1	CMD	0d	(1)
N	5	Code	506d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
			<i>0 = all departments</i>	
N	2	Scale Number	0d	(2)
N	1	Limit Type	0 - 2 d	(1)
			<i>0 = amount</i>	
			<i>1 = entries</i>	
			<i>2 = margin</i>	
N	1	Abs./Percent	0 - 1d	(1)
			<i>0 = absolute</i>	
			<i>1 = rate as percentage</i>	
N	11	Limit	(without decimal point)	(11)

				(29)

Response (Multi-block, for unformatted output)

<i>Department</i>				
N	1	RSP	1,3d	(1)
N	5	Code	506d	(5)
F	4	Control	see definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = Department	(3)
N	4	Department	1 - 9999d	(4)
C	20	Department Descript.	ASCII characters	(20)

				(43)
<i>Article</i>				
N	1	RSP	1,3d	(1)
N	5	Code	506d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	1d = Article	(3)
N	6	PLU Number	1 - 999999d	(6)
C	13	EAN Number	ASCII numbers	(13)
C	20	Article Description	ASCII character	(20)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(in g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11)

				(102)

Specific Values

N	1	RSP	1,3d	(1)
N	5	Code	506d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	2d = Specific Values	(3)
N	11	Ave. Selling Price	+/- 0-999999d	(11)
N	11	Sales/Entries	(without decimal point)	(11)
N	11	Margin/Entries	(without decimal point)	(11)

(52)*End*

N	1	RSP	1,3d	(1)
N	5	Code	506d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	255d = End Of Report	(3)
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(19)

Access Code: 507

Function: Worst Selling Articles

Listing of Article Sales, which fall below a given Lower Limit

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a 2/a 2/a

Command

N	1	CMD	0d	(1)
N	5	Code	507d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
			<i>0 = all departments</i>	
N	2	Scale Number	0d	(2)
N	1	Limit Type	0 - 2 d	(1)
			<i>0 = amount</i>	
			<i>1 = entries</i>	
			<i>2 = margin</i>	
N	1	Abs./Percent.	0 - 1d	(1)
			<i>0 = absolute</i>	
			<i>1 = percentage</i>	
N	11	Limit	(without decimal point)	(11)

				(29)

Response (Multi-block, for unformatted output)

<i>Department</i>				
N	1	RSP	1,3d	(1)
N	5	Code	507d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = Department	(3)
N	4	Department	1 - 9999d	(4)
C	20	Department Description	ASCII character	(20)

				(43)
<i>Article</i>				
N	1	RSP	1,3d	(1)
N	5	Code	507d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	1d = Article	(3)
N	6	PLU Number	1 - 999999d	(6)
C	13	EAN Number	ASCII numbers	(13)
C	20	Article Description	ASCII character	(20)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of Entries		(11)
N	11	Margin	(without decimal point)	(11)

				(102)

Specific Values

N	1	RSP	1,3d	(1)
N	5	Code	507d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	2d = Specific Values	(3)
N	11	Average	Selling Price	+/- 0-999999d (11)
N	11	Sales/Entries	(without decimal point)	(11)
N	11	Margin/Entries	(without decimal point)	(11)

(52)*End*

N	1	RSP	1,3d	(1)
N	5	Code	507d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	255d = End Of Report	(3)

(19)

Access Code: 508
Function: Special Offer

Listing of sales due to all currently running and closed special offers according to special offer number

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	508d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	4	from Special Offer Number	0 - 9999d	(4)
			<i>0 = lowest special offer number</i>	
N	4	to Special Offer Number	0 - 9999d	(4)
			<i>0 = highest special offer number</i>	

(24)

Response (Multi-block, for unformatted output)

Special Offer

N	1	RSP	1,3d	(1)
N	5	Code	508d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = Special Offer.	(3)
N	4	Special Offer Number	1 - 9999d	(4)
C	20	Special Offer Text	ASCII character	(20)
N	2[3]	Start Date	dd/mm/yy	(6)
N	2[2]	Start Time	hh/mm	(4)
N	2[3]	End Date	dd/mm/yy	(6)
N	2[2]	End Time	hh/mm	(4)
N	1	Special Offer Status	0 - 3d	(1)
			<i>0 = special offer inactive</i>	
			<i>1 = special offer active</i>	
			<i>2 = special offer closed</i>	
			<i>3 = special offer available</i>	

(46)

Special Offer sales

N	1	RSP	1,3d	(1)
N	5	Code	508d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	1d = Special offer sales	(3)
N	4	Department number	1 - 9999d	(4)
N	6	PLU number	1 - 999999d	(6)
C	20	Article description	ASCII character	(20)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of Entries	(11)	(11)
N	11	Margin	(without decimal point)	(11)

(93)

SO Special Offer sales total

N	1	RSP	1,3d	(1)
N	5	Code	508d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record-Type	2d=SO Total Sales	(3)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales by Weight	(g)	(11)
N	11	Number of Entries	(11)	
N	11	Margin	(without decimal point)	(11)

(63)*Specific Values*

N	1	RSP	1,3d	(1)
N	5	Code	508d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	3d = Specific Values	(3)
N	11	Sales/Entries	(without decimal point)	(11)
N	11	Margin/Entries	(without decimal point)	(11)

(41)*End*

N	1	RSP	1,3d	(1)
N	5	Code	508d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	255d = End Of Report	(3)
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(19)

Access Code: 509

Function: Article Price Changes

Lists price changes

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	509d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Response (Multi-block, for unformatted output)

Price modifications

N	1	RSP	1,3d	(1)
N	5	Code	509d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	0d = Price modification	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	2[3]	Date	dd/mm/yy	(6)
N	2[2]	Time	hh/mm	(4)

N	1	Price Type	0 - 3d	(1)
				0 = Selling Price 1
				1 = Selling Price 2
				2 = Staggered block price 1
				3 = Staggered block price 2

only for L2

N	6	PLU Number	1 - 999999d	(6)
C	20	Article Description	ASCII character	(20)
N	8	Old Price	+/- 0-999999(9)d	(8)
N	8	New Price	+/- 0-999999(9)d	(8)

End

N	1	RSP	1,3d	(1)
N	5	Code	509d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	255d = End Of Report	(3)
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(19)

Access Code: 510
Function: Sales – Time Based

Listing of Sales According to Time of Day or Day of the Week

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	510d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	1	Time of Day / Day of Week	0 - 1d 0 = time of day 1 = day of week	(1)
N	2	From Time/Day	0-24d or 0-7d 1: 0-1 hrs / 24: 23-24 hrs or 1: Monday / 7: Sunday	(2)
N	2	To Time/Day	0-24d or 0-7d 1: 0-1 hrs / 24: 23-24 hrs or 1: Monday / 7: Sunday	(2)

				(21)

Response (Multi-block, for unformatted output)

<i>Department</i>				
N	1	RSP	1,3d	(1)
N	5	Code	510d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = Department	(3)
N	4	Department	1 - 9999d	(4)
C	20	Department Description	ASCII character	(20)

				(43)
<i>Time of day/Day of the week</i>				
N	1	RSP	1,3d	(1)
N	5	Code	510d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	1d=Time/Day (3)	
N	1	Time of Day /Day of the Week	0 - 1d	(1)
N	2	From Time/Day	1-24d or 1-7d	(2)

				(22)

Sales

N	1	RSP	1,3d	(1)
N	5	Code	510d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	2d = Sales	(3)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	11	Number of Entries	(11)	
N	11	Number of Customers	(11)	

(63)*Specific Values*

N	1	RSP	1,3d	(1)
N	5	Code	510d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	3d = Specific Values	(3)
N	11	Sales/Customer	(without decimal point)	(11)
N	11	Entries/Customer		(11)

(41)*End*

N	1	RSP	1,3d	(1)
N	5	Code	510d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	255d = End Of Report	(3)
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(19)

Access Code: 511

Function: Summary Journal

Listing of Receipt Totals for a specified time period

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	511d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2[3]	From Date	dd / mm / yy	(6)
N	2[2]	From Time	hh / mm	(4)
N	2[3]	To Date	dd / mm / yy	(6)
N	2[2]	To Time	hh / mm	(4)

				(36)

Response (Multi-block, for unformatted output)

<i>Receipt totals</i>				
N	1	RSP	1,3d	(1)
N	5	Code	511d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = Receipt totals	(3)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
				<i>0d = booking</i>
				<i>1d = cancellation</i>
N	1	Type of Sale	0 - 3d	(1)
				<i>0 = total receipt regular sale</i>
				<i>1 = total receipt personnel sale</i>
				<i>2 = checkout-slips</i>
				<i>3 = orders</i>
N	11	Number of Entries		(11)
N	11	Total Weight	(g)	(11)
N	11	Total Amount	(without decimal point)	(11)
N	11	Margin	(without decimal point)	(11) only for L2

				(87)
<i>End</i>				
N	1	RSP	1,3d	(1)
N	5	Code	511d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	255d = End Of Report	(3)

				(19)

Access Code: 512

Function: Detailed Journal

Full listing of all receipts in a given range of receipt numbers

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2[3]	From Date	dd / mm / yy	(6)
N	4	From Receipt Number	0 - 9999d	(4)
N	4	To Receipt Number	0 - 9999d	(4)

				(30)

Response (Multi-block, for unformatted output)

Booking / Single Entry Receipt / Blank Receipt

N	1	RSP	1,3d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0 - 2d	(3)
			<i>0 = booking</i>	
			<i>1 = single entry receipt</i>	
			<i>2 = blank receipt</i>	
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			<i>0d = booking</i>	
			<i>1d = cancellation</i>	
N	1	Booking Type	0 - 4d	(1)
			<i>0 = PLU (Weigh)</i>	
			<i>1 = miscellaneous</i>	
			<i>2 = PLU (non-weigh)</i>	
			<i>3 = hand +</i>	
			<i>4 = hand -</i>	
N	1	Price Type	0 - 9d	(1)
			<i>0 = selling Price 1</i>	
			<i>1 = selling Price 2</i>	
			<i>2 = staggered block price 1</i>	
			<i>3 = staggered block price 2</i>	
			<i>4 = open price 1</i>	
			<i>5 = open price 2</i>	
			<i>6 = hand + 1</i>	
			<i>7 = hand + 2</i>	
			<i>8 = special offer price 1</i>	
			<i>9 = special offer price 2</i>	
N	6	PLU-/Article group number	1 - 999999d	(6)
N	11	Weight/Quantity	(g, pieces)	(11)
N	11	Amount	(without decimal point)	(11)
N	11	Margin	(without decimal point)	(11) only for L2

(83)

Receipt totals

N	1	RSP	1,3d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	3d = Receipt totals	(3)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			<i>0d = booking</i>	
			<i>1d = cancellation</i>	
N	1	Type of Sale	0 - 1d	(1)
			<i>0 = regular sale</i>	
			<i>1 = personnel Sale</i>	<i>only for L2</i>
			<i>2 = checkout-Slips</i>	
			<i>3 = orders</i>	
N	11	Number of Entries		(11)
N	11	Total Weight	(g)	(11)
N	11	Total Amount	(without decimal point)	(11)
N	11	Margin	(without decimal point)	(11) only for L2

(87)*Payment Method*

N	1	RSP	1,3d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale	0d	(2)
N	3	Record Type	4d = Payment Method	(3)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			<i>0d = booking</i>	
			<i>1d = cancellation</i>	
N	1	Payment Method Number	0 - 9d	(1)
N	11	Given Amount	(without decimal point)	(11)
C	3	Abbreviation	ASCII character	(3)
N	1	Decimal Places	0 - 3d	(1)
N	1	Rounding	0: to nearest 'one' 1: to nearest 'five'	(1)
N	11	Factor	(Exchange rate)	(11)
N	11	Rate	(without decimal point)	(11)

(81)

Change returned

N	1	RSP	1,3d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N 3 Record Type 5d = Change returned (3)

N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)

*0d = booking**1d = cancellation*

N	11	Given	(Sum of all Payment Methods without decimal point in local currency)	(11)
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N	11	Total	(without decimal point)	(11)
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N	11	Change Returned	(without decimal point)	(11)
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(75)*VAT*

N	1	RSP	1,3d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N 3 Record-Type 6d = VAT (3)

N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)

*0d = booking**1d = cancellation*

N	2	VAT Number	0 - 15d	(2)
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N	11	VAT Sales	(without decimal point)	(11)
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(55)

Article Discount

N	1	RSP	1,3d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	7d = Article Discount	(3)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)

*0d = booking**1d = cancellation*

N	6	PLU Number	1 - 999999d	(6)
N	1	Mark-up / Discount Number	0 - 9d	(1)
N	5	Percentage	+/- 0 - 9999d	(5)
<i>Percentage +/-###.## (0-99.99)</i>				
N	11	Amount	(without decimal point)	(11)
N	11	Mark-up / Discount amount.	(without decimal point)	(11)

(76)*Discount total*

N	1	RSP	1,3d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	8d = Discount subtotal	(3)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)

*0d = booking**1d = cancellation*

N	1	Mark-up / Discount Number	0 - 9d	(1)
N	5	Percentage	+/- 0 - 9999d	(5)
N	11	Subtotal	(without decimal point)	(11)
N	11	Mark-up / Discount Amount	(without decimal point)	(11)

(70)

Customer number

N	1	RSP	1,3d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N 3 Record Type 9d = Customer number (3)

N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d	(2)
N	1	Booking/Cancellation	0 - 1d	(1)

*0d = booking
1d = cancellation*

N	1	Receipt Type	0 - 1d	(1)
			<i>0: checkout-slip 1: collection-slip</i>	

N	4	Customer Number	0 - 9999d	(4)
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(47)

Checkout-Slip / Collection-Slip

N	1	RSP	1,3d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N 3 Record Type 10d = Checkout-Slip / Collection-Slip (3)

N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d	(2)
N	1	Booking/Cancellation	0 - 1d	(1)

*0d = booking
1d = cancellation*

N	1	Receipt Type	0 - 1d	(1)
			<i>0: checkout-slip 1: collection-slip</i>	

N	4	Customer number	0 - 9999d	(4)
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N	4	Customer Receipt No.	0 - 9999d	(4)
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N	2[3]	Customer Date	dd / mm / yy	(6)
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N	2[2]	Customer Time	hh / mm	(4)
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N	11	Number of Entries		(11)
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N	11	Total	(without decimal point)	(11)
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(83)

Electronic Cash

N	1	RSP	1,3d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N 3 Record-Type 11d = Electronic Cash (3)

N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d	(2)
N	1	Booking/Cancellation	0 - 1d	(1)

*0d = booking**1d = cancellation*

N	8	Terminal-ID	0 - 99999999d	(8)
N	4	Receipt Number	0 - 9999d	(4)
N	6	Trace Number	0 - 999999d	(6)
N	3	Card Type	0 - 255d (see Access Code 821)	(3)

(47)*Shortcode*

N	1	RSP	1,3d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N 3 Record-Typ 12d = Shortcode (3)

N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d	(2)
N	1	Booking/Cancellation	0 - 1d	(1)

*0d = booking**1d = cancellation*

N	3	Shortcode-No.	0 - 100d	(3)
N	6	PLU-Number	0 - 999999d	(6)
N	7	weight	0 - 9999999d	(7)

without decimal point

N	7	Number or units	0 - 9999999d	(7)
C	6	Shortcode-Text		(6)

(71)*End*

N	1	RSP	1,3d	(1)
N	5	Code	512d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N 3 Record Type 255d = End Of Report (3)-----
(19)

Access Code: 517
Function: Grand Total (Cash register)

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
 2/a 2/a/e 2/a/e

Command

N	1	CMD	0d	(1)
N	5	Code	517d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	from Scale Number	0 - 99d, 0 = lowest	(2)
N	2	to Scale Number	0 - 99d, 0 = highest	(2)

				(20)

Response (Multi-block, for unformatted output)

<i>Grand Total</i>				
N	1	RSP	1,3d	(1)
N	5	Code	517d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N	3	Record Type	0d = Grand Total	(3)
N	11	Grand Total		(11)

				(30)
<i>End</i>				
N	1	RSP	1,3d	(1)
N	5	Code	517d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	255d = End Of Report	(3)

				(19)

Access Code: 518 Function: Cash Register Takings

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
	2/a							2/a/e		2/a/e			

Command

N	1	CMD	0d	(1)
N	5	Code	518d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	From Scale Number	0 - 99d, 0 = lowest	(2)
N	2	To Scale Number	0 - 99d, 0 = highest	(2)

				(20)

Response (Multi-block, for unformatted output)

<i>Payment Method</i>				
N	1	RSP	1,3d	(1)
N	5	Code	518d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = Payment Method	(3)
N	1	Payment Method Number	0 - 9d	(1)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Number of Customers	(without decimal point)	(11)
N	11	Float	(without decimal point)	(11)
N	11	Safe Deposit Value	(without decimal point)	(11)
N	11	Till Deposit	(without decimal point)	(11)
N	11	Till Payout	(without decimal point)	(11)

				(86)
<i>End</i>				
N	1	RSP	1,3d	(1)
N	5	Code	518d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	255d = End Of Report	(3)

				(19)

Access Codes: 519 and 520**Function: Cash Register Totalling / Report**

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a/e 2/a/e

Command 519

N	1	RSP	1,3d	(1)
N	5	Code	519d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)

				(16)

Command 520

N	1	RSP	1,3d	(1)
N	5	Code	520d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	From Scale Number	0 - 99d, 0 = lowest	(2)
N	2	To Scale Number	0 - 99d, 0 = highest	(2)
N	1	Short-/Long Report	0 - 2d	(1)
				<i>0: short report (summary)</i>
				<i>1: long report (detailed)</i>
				<i>2: totals short (Short report 2)</i>

				(21)

Response (Multi-block, for unformatted output)

Operator Sales

N	1	RSP	1,3d	(1)
N	5	Code	519d / 520d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = Operator sales	(3)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Number of Customers		(11)
N	11	Line cancellation (Amount, without decimal point)		(11)
N	5	Number of Line cancellations		(5)
N	11	Receipt cancellations (Amount; without decimal point)		(11)
N	5	Number of Receipt cancellations		(5)
N	5	Number of Blank Receipts		(5)

				(80)

Payment Method

N	1	RSP	1,3d	(1)
N	5	Code	519d / 520d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)

N	3	Record Type	1d = Payment Method	(3)
N	1	Payment Method Number	0 - 9d	(1)

N	11	Sales Revenue	(without decimal point)	(11)
N	11	Number of Customers		(11)
N	11	Float	(without decimal point)	(11)
N	11	Safe Deposit Value	(without decimal point)	(11)
N	11	Till deposit	(without decimal point)	(11)
N	11	Till payout	(without decimal point)	(11)
N	11	Balance	(without decimal point)	(11)

(97)*Mark-up / Discount*

N	1	RSP	1,3d	(1)
N	5	Code	519d / 520d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)

N	3	Record Type	2d = Mark-up / Discount	(3)
N	1	Mark-up / Discount number	0 - 9d	(1)
N	11[2]	Mark-up / Discount sales	(without decimal point)	(22)
N	11[2]	Number of Entries		(22)

(64)*Sales category*

N	1	RSP	1,3d	(1)
N	5	Code	519d / 520d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)

N	3	Record Type	3d = Sales category	(3)
N	1	Sales Category Number	0 - 9d	(1)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Number of Receipts		(11)

(42)*VAT*

N	1	RSP	1,3d	(1)
N	5	Code	519d / 520d	(5)
F	4	Control	see Definition	(4)
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)

N	3	Record Type	4d = VAT	(3)
N	2	VAT Number	0 - 15d	(2)
N	11	VAT Sales	(without decimal point)	(11)

(32)*End*

N	1	RSP	1,3d	(1)
N	5	Code	519d / 520d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

N	3	Record Type	255d = End Of Report	(3)
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(19)

Access Code: 521; 522; 523**Function: Orders / Checkout-Slips / Collection-Slips**

521 – Order Report sorted according to PLU

522 – Listing of Checkout-Slips

523 – Listing of Collection-Slips

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a

Command

N	1	CMD	0d	(1)
N	5	Code	521d / 522d / 523d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Response 521

N	1	RSP	1,3d	(1)
N	5	Code	521d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = Article	(3)
N	4	PLU Department Number	1 - 9999d	(4)
N	6	PLU Number	1 - 999999d	(6)
C	20	PLU Text	ASCII characters	(20)
N	11	Weight/ Quantity sales	(g, pieces)	(11)
F	4	Article Flags	0: Weigh.; 1: Non-weigh	(4)
N	8	Delivery Time and Day	(hh-dd-mm-yy)	(8)
N	5	Delivery ID	0 - 99999d	(5)

				(77)

Response 522 (Checkout-Slip) / 523 (Orders)

N	1	RSP	1,3d	(1)
N	5	Code	522d / 523d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	0d = see Access Code	(3)
N	4	Customer number	0 - 9999d	(4)
N	3	Position Number	0 - 999d	(4)
N	1	Booking/Cancellation	0 - 1d	(1)
				<i>0d = booking</i>
				<i>1d = cancellation</i>
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	2	Operator Number	1 - 99d	(2)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Number of Entries		(11)

				(66)
<i>End</i>				
N	1	RSP	1,3d	(1)
N	5	Code	521d / 522d / 523d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	255d = End Of Report	(3)

				(19)

Access Code: 524

Function: Operator Time Keeping

Listing of operator sign-ons, sign-offs and short sign-offs within a given time period

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a/e 2/a/e

Command

N	1	CMD	0d	(1)
N	5	Code	524d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	2[3]	From Date	dd / mm / yy	(6)
N	2[2]	From Time	hh / mm	(4)
N	2[3]	To Date	dd / mm / yy	(6)
N	2[2]	To Time	hh / mm	(4)

				(36)

Response 524

N	1	RSP	1,3d	(1)
N	5	Code	524d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	Record Type	0d = Sign-on, sign-off, short sign-off	(3)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	4	Department Number	1 - 9999d	(4)
N	2	Device Number	1 - 99d	(2)
N	2	Operator Number	1 - 99d	(2)
N	2	Roving Operator Group	1 - 15d	(2)
N	2	Operator Key Number	1 - 99d	(2)
N	2	Status	0 - 2d	(2)
				0: signed-off
				1: signed-on
				2: shortly signed-off

				(43)
End				
N	1	RSP	1,3d	(1)
N	5	Code	524d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	255d = End of Report	(3)

				(19)

Access Code: 530

Function: Sales Report - Accounts

Account-Sales Report - sorted according to PLU

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a

Command

N	1	CMD	0d	(1)
N	5	Code	530d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)
C	20	Account Number.	ASCII character (alphanumeric)	(20)
N	1	Short/Long Report	0 - 1d <i>0d = short report</i> <i>1d = long report</i>	(1)
N	1	PLU/EAN	0d (PLU)	(1)
N	6	From PLU Number	0 - 999999d <i>0 = lowest PLU number</i>	(6)
C	13	From EAN Number	ASCII numbers <i>13x0 = lowest EAN number</i>	(13)
N		To PLU Number	0 - 999999d <i>0 = highest PLU number</i>	(4)
C	13	To EAN Number	ASCII numbers <i>13x0 = highest EAN number</i>	(13)

				(74)

Response (Multi-block, for unformatted output)

N	1	RSP	1,3d	(1)
N	5	Code	530d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)
C	1	Record Type	0d = Department	(1)
N	4	Department	1 - 9999d	(4)
C	20	Department Description	ASCII character	(20)

				(41)
<i>Article</i>				
N	1	RSP	1,3d	(1)
N	5	Code	530d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)
C	1	Record Type	1d = Article	(1)
N	6	PLU Number	1 - 999999d	(6)
C	13	EAN Number	ASCII numbers	(13)
C	20	Article description	ASCII character	(20)
N	11	Sales Revenue	(without decimal point)	(11)
N	11	Sales in Weight	(g)	(11)
N	6	Number of Entries	(6)	(11)
N	11	Margin	(without decimal point)	(11)

				(95)

Specific Values (only for Long report)

N	1	RSP	1,3d	(1)
N	5	Code	530d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0d	(2)
N	Record Type	2d = Specific Values		(1)
N	7	Average Selling Price	+/- 0 - 999999d	(7)
N	6	Sales/Entries	(without decimal point)	(4)
N	11	Margin/Entries	(without decimal point)	(11)

				(39)

Access Code: 532

Function: Orders - MIRA Cash Register

Order report according to Date/Time - ID – Department No. - PLU

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a/e 2/a/e

Command

N	1	CMD	0d	(1)
N	5	Code	532d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2[4]	From Date/Time	hh / dd / mm / yy	(8)
N	2[4]	To Date/Time	hh / dd / mm / yy	(8)
N	5	From Delivery ID	0 – 99999d	(5)
N	5	To Delivery ID	0 – 99999d	(5)

				(42)

Response (Multi-block, for unformatted output)

N	1	RSP	1,3d	(1)
N	5	Code	532d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
C	3	Record Type	0d = Article	(3)
N	2[4]	Date/Time	hh / dd / mm / yy	(8)
N	5	From Delivery ID	1 – 99999d	(5)
N	4	Department Number	1 – 9999d	(4)
N	6	PLU Number	1 – 999999d	(6)
C	20	TLU	ASCII character	(20)
N	11	Amount	+/- 0 – 9999999d	(11)
N	5	Weight/Quantity	0 – 99999d (g, pieces)	(5)
F	4	Weigh / Non-Weigh Flag		(4)

Bit	Meaning	Value	Remark
0	Weigh / Non-Weigh PLU.	0 = Weigh / 1 = Non-weigh	
1-15	Don't care		

				(82)
<i>End</i>				
N	1	RSP	1,3d	(1)
N	5	Code	532	(5)
F	4	Control	see Definition	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	3	Record Type	255d = End of Report	(3)

				(19)

Access Code: 533**Function: Delivery Note Data - MIRA Cash Register**

Listing of all delivery notes for a range of given customer numbers

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03 2/a/e	LM25	LM23 2/a/e	LM60	LE61	LE70
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Command

N	1	CMD	0d	(1)
N	5	Code	533d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	Selection Control	000 – 001d 000 = all closed 001 = all cancelled	(1)
C	13	From Customer Number	ASCII numbers	(13)
C	13	To Customer Number	ASCII numbers	(13)

				(43)

Response (Multi-block, for unformatted output)

<i>Booking</i>				
N	1	RSP	1,3d	(1)
N	5	Code	533d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
C	3	Record Type	0d = Booking	(3)
C	13	Customer Number	ASCII Numbers	(13)
N	4	Receipt Number	0 - 9999d	(4)
N	3	Position Number	0 – 999d	(3)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Selection Control	002 - 003d 002 = closed 003 = cancelled	(3)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	2	Operator Number	1 - 99d	(2)
N	1	Booking/Cancellation	0 – 1d 0d = booking 1d = cancellation	(1)
N	1	Booking type	0 - 4d 0 = weigh PLU 1 = miscellaneous 2 = non-weigh PLU 3 = hand + 4 = hand -	(1)

N	1	Price Type	0 - 9d 0 = <i>selling Price 1</i> 1 = <i>selling Price 2</i> 2 = <i>staggered block price 1</i> 3 = <i>staggered block price 2</i> 4 = <i>open Price 1</i> 5 = <i>open Price 2</i> 6 = <i>hand + 1</i> 7 = <i>hand + 2</i> 8 = <i>special Offer Price 1</i> 9 = <i>special Offer Price 2</i>	(1)
N	6	PLU No. / Article Group No.	1 - 999999d / 1 - 9999d	(6)
C	40	Article description	ASCII character	(40)
N	11	Weight/Quantity	0 – 99999999999 (g, pieces)	(11)
N	11	Tare	0 – 99999999999 (g)	(11)
N	8	Price	+/- 0 - 999999(9)d	(8)
N	11	Amount	(without decimal point)	(11)
N	11	Margin	(without decimal point)	(11)
N	2	VAT Number	0 - 15d	(2)
N	1	Mark-up / Discount Number	0 - 9d	(1)
N	5	Percentage	+/- 0 - 9999d	(5)
N	11	Mark-up / Discount Amount	(without decimal point)	(11)
N	4	PLU Department Number	1 - 9999d	(4)
N	2	PLU Scale Number	1 - 99d	(2)
F	4	Art. Flags		(4)

Bit	Meaning	Value
0	Weigh-/non-weigh article	0 = weigh / 1 = non-weigh
1	Enable price overwrite	0 = no / 1 = yes
2	Special Offer	0 = no / 1 = yes
3	Special Offer reserve	0 = no / 1 = yes
4	Block Article	0 = no / 1 = yes
5	Enable discount	0 = no / 1 = yes
6-7	Don't care	
8-9	Traffic Light Smiley	00 = without 01 = green 10 = red 11 = depending on margin
10-11	Product Text	00 = without 01 = show 10 = print
12	Weight type	0 = Weight has been weighed 1 = Weight has been manually inputted or scanned in
13	Don't care	
14-15	Decimal places in weight value	00 = 3 decimal places (Standard) 01 = 2 decimal places 10 = 1 decimal place 11 = no decimal places

N	3	Product Text number	1 - 999d 0 = <i>no Product Text</i>	(3)
N	11	Gratis Amount	(without decimal point)	(11)
N	11	Gratis Weight/quantity	(g) / (pieces)	(11)
N	1	Sales Red/Yellow/Green		(1)
N	1	Tare type	0 - 1d 0 = <i>tare offset</i> 1 = <i>tare default</i>	(1)

(217)

Receipt Totals

N	1	RSP	1,3d	(1)
N	5	Code	533d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
C	3	Record Type	3d = Receipt totals	(3)
C	13	From Customer Number	ASCII Numbers	(13)
N	4	Receipt Number	0 - 9999d	(4)
N	3	Position Number	0 - 999d	(3)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Selection Control	002 - 003d <i>002 = closed</i> <i>003 = cancelled</i>	(3)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	2	Operator Number	1 - 99d	(2)
N	1	Booking/Cancellation	0 - 1d <i>0d = booking</i> <i>1d = cancellation</i>	(1)
N	11	Number of Entries		(11)
N	11	Total Weight	0 - 99999999999 (g)	(11)
N	11	Total Amounts	0 - 99999999999 (without decimal point)	(11)
N	11	Margin	0 - 99999999999 (without decimal point)	(11)
N	11	Paid	0 - 99999999999 <i>(sum of all Payment Methods without decimal point in local currency)</i>	(11)
N	11	Change Returned	0 - 99999999999 (without decimal point)	(11)
N	1	Mark-up / Discount Number	0 - 9d	(1)
N	5	Percentage	+/- 0 - 9999d	(5)
N	11	Total	0 - 99999999999 (without decimal point)	(11)
N	11	Mark-up / Discount amount	0 - 99999999999 (without decimal point)	(11)

				(155)

Payment Method

N	1	RSP	1,3d	(1)
N	5	Code	533d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

C	3	Record Type	4d = Payment Method	(3)
C	13	From Customer Number	ASCII numbers	(13)
N	4	Receipt Number	0 - 9999d	(4)
N	3	Position Number	0 - 999d	(3)

N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)

N	3	Selection Control	002 - 003d	(3)
			<i>002 = closed</i>	
			<i>003 = cancelled</i>	

N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	2	Operator Number	1 - 99d	(2)
N	1	Booking/Cancellation	0 - 1d	(1)

0d = booking
1d = cancellation

N	1	Sales Category Number	0 - 9d	(1)
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N	1	Payment Method Number	0 - 9d	(1)
N	11	Amount Paid	0 - 99999999999d (without decimal point)	(11)
C	3	Payment Method Abbrev.	ASCII character	(3)
N	1	Decimal Places	0 - 3d	(1)
N	1	Rounding	0 - 1d	(1)

0d = Rounding to the nearest 'one'
1d = Rounding to the nearest 'five'

N	11	Factor	0 - 99999999999d (without decimal point)	(11)
N	11	Rate	0 - 99999999999d (without decimal point)	(11)

 (101)

VAT

N	1	RSP	1,3d	(1)
N	5	Code	533d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

C	3	Record Type	6d = VAT	(3)
C	13	From Customer Number	ASCII Numbers	(13)
N	4	Receipt Number	0 - 9999d	(4)
N	3	Position Number	0 - 999d	(3)

N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)

N	3	Selection Control	002 - 003d	(3)
			<i>002 = closed</i>	
			<i>003 = cancelled</i>	

N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	2	Operator Number	1 - 99d	(2)
N	1	Booking/Cancellation	0 - 1d	(1)

0d = booking
1d = cancellation

N	2	VAT Number	0 - 15d	(2)
N	4	VAT Rate	0 - 9999d	(4)
N	11	VAT Sales	0 - 99999999999d (without decimal point)	(11)
N	11	VAT Amount	0 - 99999999999d (without decimal point)	(11)

 (89)

<i>Shortcode</i>				
N	1	RSP	1,3d	(1)
N	5	Code	533d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
C	3	Record Type	12d = Shortcode	(3)
C	13	From Customer Number	ASCII Numbers	(13)
N	4	Receipt Number	0 - 9999d	(4)
N	3	Position Number	0 - 999d	(3)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Selection Control	002 - 003d	(3)
			002 = closed	
			003 = cancelled	
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	2	Operator Number	1 - 99d	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			0d = booking	
			1d = cancellation	
N	3	Shortcode-No.	0 - 100d	(3)
N	6	PLU-Number	0 - 999999d	(6)
N	7	weight	0 - 9999999d	(7)
			without decimal point	
N	7	Number or units	0 - 9999999d	(7)
C	6	Shortcode-Text		(6)

				(90)
<i>End</i>				
N	1	RSP	1,3d	(1)
N	5	Code	533d	(5)
F	4	Control	see Definition	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
C	3	Record Type	255d = End Of Report	(3)

				(19)

Access Code: 596**Function: Deletion of Cash Register Sales – With Deletion Date**

Cash Register Sales are deleted and the date of deletion is saved (contrary to Acc. Code 252)

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05 2/a/e	LM03 2/a/e	LM25 2/a/e	LM23 2/a/e	LM60	LE61	LE70
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Command

N	1	CMD	0d	(1)
N	5	Code	596d	(5)
F	4	Control	See definition	(4)
			0000 ⇒ sales level 1	
			0100 ⇒ sales level 2	
			0200 ⇒ sales level 3 (only for L2)	
			0300 ⇒ sales level 4 (only for L2)	
			0000 ⇒ cash register sales	
			0400 ⇒ closing sales revenue	
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	2	from Scale Number	0 - 64d	(2)
			0 = lowest scale number	
N	2	to Scale Number	0 - 64d	(2)
			0 = highest scale number	

				(20)

<i>Note: Deletion date and deletion time are stored with the current scale data</i>

Response

N	1	RSP	1,3d	(1)
N	5	Code	596d	(5)
F	4	Control	0d	(4)
			0: data found	
			1: data not found	
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Access Code: 598**Function: Deletion of Article Based Sales – With Deletion Date**

Article Based Sales are deleted and the date of deletion is saved (contrary to Acc. Code 236)

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05 2/a/e	LM03 2/a/e	LM25 2/a/e	LM23 2/a/e	LM60	LE61	LE70
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Command

N	1	CMD	0d	(1)
N	5	Code	598d	(5)
F	4	Control	see definition	(4)
			0000 ⇒ sales level 1	
			0100 ⇒ sales level 2	
			0200 ⇒ sales level 3 (only for L2)	
			0300 ⇒ sales level 4 (only for L2)	
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)
N	1	Sales Type	0 - 1d	(1)
			0 = general Sales (TAF is deleted)	
			1 = Special Offer Article Sales (TAF is not deleted)	
			2 = general sales (TAF is not deleted)	

				(17)

Note: Deletion date and deletion time are stored with the current scale data
--

Response

N	1	RSP	1,3d	(1)
N	5	Code	598d	(5)
F	4	Control	0d	(4)
			0: data found	
			1: data not found	
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Access Code: 616

Function: Delete Customer Data - Cash register

Customer numbers are freed and made available for new transactions

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a/e 2/a/e

Command

N	1	CMD	0d	(1)
N	5	Code	616d	(5)
F	4	Control	0 - 1d	(4)
			0: delete data and release customer number	
			1: release customer number	
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Customer Number	0 - 9999d	(4)
			-----	(20)

Response

N	1	RSP	1,3d	(1)
N	5	Code	616d	(5)
F	4	Control	0 - 1d	(4)
			0: data found	
			1: data not found	
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Customer Number	0 - 9999d	(4)
			-----	(20)

IV-E Accessing the TAF Journal - Access Codes 8XX

Definition of Access Control for the Journal

The command part (i.e. command message) of these Access Codes must specify the type of access together with the key in the Control Field. The response part (i.e. the response message from the scale) contains the updated status in its Control Field.

Access type	Meaning	Description
__ _ 2	read equal	read the given record
__ _ 3	read greater or equal	read the given record or next highest
__ _ 4	read less or equal	read the given record or next lowest
__ _ 5	read greater	read the next highest record
__ _ 6	read less	read the next lowest record

Status	Meaning	Description
0 _ _ _	OK	
1 _ _ _	file not created	
2 _ _ _	no free record	
3 _ _ _	file corrupt	
4 _ _ _	not found	record not found
5 _ _ _	wrong key	
6 _ _ _	double key	several records exist with the same Key
C _ _ _	(12) bad parameter	
D _ _ _	(13) general error	
E _ _ _	(14) undefined command	
F _ _ _	(15) not executable	

Access Code: 800**Function: Bookings, Single Entry Receipts, Blank Receipts**

Accessing data for Bookings, Single Entry Receipts and Blank Receipts

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	800d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department Number	0 - 9999d	(4)
N	2	Scale number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)

(33)**Response**

N	1	RSP	1,3d	(1)
N	5	Code	800d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department Number	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)

N	3	Record Type	0 - 2d	(3)
			<i>0 = booking</i>	
			<i>1 = single entry receipt</i>	
			<i>2 = blank receipt</i>	

N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0d = Booking, 1d = cancellation	(1)
N	1	Booking Type	0 - 4d	(1)
			<i>0 = weigh PLU</i>	
			<i>1 = miscellaneous</i>	
			<i>2 = non-weigh PLU</i>	
			<i>3 = hand +</i>	
			<i>4 = hand -</i>	

N	1	Price Type	0 - 9d	(1)
			<i>0 = selling price 1</i>	
			<i>1 = selling price 2</i>	
			<i>2 = staggered block price 1</i>	
			<i>3 = staggered block price 2</i>	
			<i>4 = open price 1</i>	
			<i>5 = Open price 2</i>	
			<i>6 = hand + 1</i>	
			<i>7 = hand + 2</i>	
			<i>8 = special offer price 1</i>	
			<i>9 = Special Offer Price 2</i>	

N	6	PLU-/Article Group Number	1 - 999999d	(6)
N	11	Weight / Quantity	(g, pieces)	(11)
N	11	Amount	(without decimal point)	(11)
N	11	Margin	(without decimal point)	(11) only for L2
N	2	VAT	0 - 15d	(2)

(88)

Access Code: 801

Function: Receipt Totals

Working with receipt totals

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e			2	2	2

Command

See Access Code 800

Note: The response message of Access Code 801 is sent in acknowledgement to a command message request using Access Code 800 to read a "Receipt Total" from a transaction file record.

Response

N	1	RSP	1,3d	(1)
N	5	Code	801d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)
N	3	Record Type	3d = Totals	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			<i>0d = booking</i>	
			<i>1d = cancellation</i>	
N	1	Type of Sale	0 - 3d	(1)
			<i>0 = regular sale</i>	
			<i>1 = personnel sale</i>	<i>only for L2</i>
			<i>2 = checkout-slip</i>	
			<i>3 = order</i>	
N	11	Number of Entries		(11)
N	11	Total Weight	(g)	(11)
N	11	Total	(without decimal point)	(11)
N	11	Margin	(without decimal point)	(11) only for L2
			-----	(90)

Access Code: 802

Function: Payment Methods

Accessing Payment Methods (e.g. cash, cheque, card, vouchers, foreign currency etc.)

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a/e

Command

see Access Code 800

Note: The response message of Access Code 802 is sent in acknowledgement to a command message request using Access Code 800 to read a "Payment Method" from a transaction file record.

Response

N	1	RSP	1,3d	(1)
N	5	Code	802d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)
N	3	Record Type	4d = Payment Method	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			<i>0d = booking</i>	
			<i>1d = cancellation</i>	
N	1	Sales category Number	0 - 9d	(1)
N	1	Payment Method Number	0 - 9d	(1)
N	11	Amount Paid	(without decimal point)	(11)
C	3	Payment Method Abbrev.	ASCII character	(3)
N	1	Decimal Places	0 - 3d	(1)
N	1	Rounding	0 - 1d	(1)
			<i>0d = rounding to the nearest 1</i>	
			<i>1d = rounding to the nearest 5</i>	
N	11	Factor	(Exchange rate, without decimal point)	(11)
N	11	Rate	(without decimal point)	(11)

				(85)

Access Code: 803
Function: Change Returned

Accessing change returned entries

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e			2	2	2

Command

see Access Code 800

Note: The response message of Access Code 803 is sent in acknowledgement to a command message request using Access Code 800 to access a "Change Returned" record in the transaction file.

Response

N	1	RSP	1,3d	(1)
N	5	Code	803d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department Number	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)
N	3	Record Type	5d = Change Returned	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			<i>0d = booking</i>	
			<i>1d = cancellation</i>	
N	11	Paid	(Sum of all Payment Methods without decimal point in local currency)	(11)
N	11	Total	(without decimal point)	(11)
N	11	Change Returned	(without decimal point)	(11)
			-----	(78)

Access Code: 804
Function: VAT

Accessing VAT Entries

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e			2	2	2

Command

see Access Code 800

Note: The response message of Access Code 804 is sent in acknowledgement to a command message request using Access Code 800 to access "VAT" from a transaction file record.

Response

N	1	RSP	1,3d	(1)
N	5	Code	804d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)
N	3	Record Type	6d = VAT	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			<i>0d = booking</i>	
			<i>1d = cancellation</i>	
N	2	VAT Number	0 - 15d	(2)
N	4	VAT Rate	0 - 9999d	(4)
N	11	VAT Sales	(without decimal point)	(11)
N	11	VAT Amount	(without decimal point)	(11)

				(73)

Access Code: 805

Function: Article Discounts

Accessing Article Discounts

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
	2/a			2/a	2/a	2/a	2/a/e	2/a/e			2	2	2

Command

see Access Code 800

Note: The response message of Access Code 805 is sent in acknowledgement to a command message request using Access Code 800 to access "Article Discounts" in a transaction file record

Response

N	1	RSP	1,3d	(1)
N	5	Code	805d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)
N	3	Record Type	7d = Article Discount	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			<i>0d = booking</i>	
			<i>1d = cancellation</i>	
N	6	PLU Number	1 - 999999d	(6)
N	1	Mark-up / Discount Number	0 - 9d	(1)
N	5	Percentage	+/- 0 - 9999d	(5)
			<i>Percentage +/-##.## (0 - 99.99)</i>	
N	11	Amount	(without decimal point)	(11)
N	11	Mark-up / Discount Amount	(without decimal point)	(11)

				(79)

Access Code: 806

Function: Total Discounts

Accessing Total Discounts

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
	2/a			2/a	2/a	2/a	2/a/e	2/a/e			2	2	2

Command

see Access Code 800

Note: The response message of Access Code 806 is sent in acknowledgement to a command message request using Access Code 800 to access "Total Discount" from a transaction file record

Response

N	1	RSP	1,3d	(1)
N	5	Code	806d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department Number	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)
N	3	Record Type	8d = Total discount	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'Self-Serve', 'Pre-Pack'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			<i>0d = booking</i>	
			<i>1d = cancellation</i>	
N	1	Mark-up / Discount Number	0 - 9d	(1)
N	5	Percentage	+/- 0 - 9999d	(5)
			<i>percentage +/-##.## (0 - 99.99)</i>	
N	11	Total	(without decimal point)	(11)
N	11	Mark-up / Discount Amount	(without decimal point)	(11)

				(73)

Access Code: 807

Function: Price Changes

Accessing price changes

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	807d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department Number	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	5	Receipt Number	10 000d	(5)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	5	Position Number	0 - 65536d	(5)

				(36)

Response

N	1	RSP	1,3d	(1)
N	5	Code	807d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	5	Receipt Number	10 000d	(5)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	5	Position Number	0 - 65536d	(5)
N	3	Record Type	9d = Price modification	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N	2	Operator Number	1 - 99d	(2)
N	1	Price Type	0 - 3d	(1)
			0 = selling Price 1	
			1 = selling Price 2	only for L2
			2 = staggered block price 1	
			3 = staggered block price 2	
N	6	PLU Number	1 - 999999d	(6)
N	8	Old Price	+/- 0-999999(9)d	(8)
N	8	New Price	+/- 0-999999(9)d	(8)

				(70)

Access Code: 808

Function: Operator Timekeeping

Accessing operator sign-ons, sign-offs and quick sign-offs

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	808d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department Number	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	5	Receipt Number	20 000d	(5)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	5	Position Number	0 - 65536d	(5)

(36)

Response

N	1	RSP	1,3d	(1)
N	5	Code	808d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	5	Receipt Number	20 000d	(5)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	5	Position Number	0 - 65536d	(5)
N	3	Record type	10d = Sign-on, sign-off, quick sign-off	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N	2	Operator Number	1 - 99d	(2)
N	2	Roving Operator Group	1 - 15d	(2)
N	2	Operator Keys	1 - 99d	(2)
N	1	Status	0 - 2d	(1)
			0 = signed-off	
			1 = signed-on	
			2 = shortly signed-off	

(52)

Access Code: 809**Function: Resetting Receipt Numbers and Deleting the TAF**

After executing this command, all receipt numbers in a scale or in a receipt number circuit are freed for use with new transactions. The TAF can also be deleted.

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	809d	(5)
F	4	Control	0 - 2d	(4)
			<i>0 = delete TAF</i>	
			<i>1 = reset receipt number</i>	
			<i>2 = delete TAF and reset receipt number</i>	
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

				(16)

Response

N	1	RSP	1,3d	(1)
N	5	Code	809d	(5)
F	4	Control	0 - 1d	(4)
			<i>0 = ok</i>	
			<i>1 = error</i>	
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)

				(16)

Access Code: 810**Function: List Free Space in TAF Memory**

The command part of this Access Code displays the amount of free memory space remaining in the transaction file.

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a	2/a	2/a	2/a	2/a	2/a	2/a	2/a/e	2/a/e	2/a/e	2/a/e	2	2	2

Command

N	1	CMD	0d	(1)
N	5	Code	810d	(5)
F	4	Control	0d	(4)
N	4	Department	0d	(4)
N	2	Scale Number	0d	(2)

				(16)

Response

N	1	RSP	1,3d	(1)
N	5	Code	810d	(5)
F	4	Control	0 - 1d	(4)
				<i>0d=no overflow</i>
				<i>1d=overflow</i>
N	4	Department	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N	5	Amount of Memory	0 - 65536	(5)

				(21)

Access Code: 811
Function: Customer Number

Accessing the customer number in a Checkout-Slip or Collection-Slip

LL07	LL05 2/a	L03	LL27	LM01	LM02	LM04	LM05	LM03 2/a/e	LM25	LM23	LM60	LE61	LE70
------	-------------	-----	------	------	------	------	------	---------------	------	------	------	------	------

Command

see Access Code 800

Note: The response message of Access Code 811 is sent in acknowledgement to a command message request using Access Code 800 to access a "Customer Number" in a transaction file record.

Response

N	1	RSP	1,3d	(1)
N	5	Code	811d	(5)
F	4	Control	Access|Key|Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)
N	3	Record Type	11d = Customer Number	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'SS', 'PP'	(2)
N	1	Booking/Cancellation	0 - 1d 0d = booking 1d = cancellation	(1)
N	1	Receipt Type	0 - 1d 0 = checkout-slip 1 = collection-slip	(1)
N	4	Customer Number	0 - 9999d	(4)
				(50)

Access Code: 812

Function: Checkout-Slips and Collection-Slips

Settling Checkout-Slip and Collection-Slip amounts to a Receipt

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a 2/a/e

Command

see Access Code 800

Note: The response message of Access Code 812 is sent in acknowledgement to a command message request using Access Code 800 to access "Checkout-Slip and Collection-Slip amounts" in a transaction file record.

Response

N	1	RSP	1,3d	(1)
N	5	Code	812d	(5)
F	4	Control	Access|Key|Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)
N	3	Record Type	12d = Checkout-/Collection - Slip	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'SS', 'PP'	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			0d = booking	
			1d = cancellation	
N	1	Receipt Type	0 - 1d	(1)
			0 = checkout-slip	
			1 = collection-slip	
N	4	Customer Number	0 - 9999d	(4)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Customer Date	dd / mm / yy	(6)
N	2[2]	Customers Time	hh / mm	(4)
N	11	Number of Entries		(11)
N	11	Total	(without decimal point)	(11)

				(86)

Access Code: 813
Function: Receipt Cancellation / Deletion

LL07 2/a	LL05 2/a	L03 2/a	LL27 2/a	LM01 2/a	LM02 2/a	LM04 2/a	LM05 2/a/e	LM03 2/a/e	LM25 2/a/e	LM23 2/a/e	LM60 2	LE61 2	LE70 2
-------------	-------------	------------	-------------	-------------	-------------	-------------	---------------	---------------	---------------	---------------	-----------	-----------	-----------

Command

N	1	CMD	0d	(1)
N	5	Code	813d	(5)
F	4	Control	0 - 1d	(4)
			<i>0d = cancellation</i>	
			<i>1d = deletion</i>	
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)

				(33)

Response

N	1	RSP	1,3d	(1)
N	5	Code	813d	(5)
F	4	Control	0 - 1d	(4)
			<i>0d = receipt cancelled</i>	
			<i>1d = receipt not found</i>	
			<i>2d = receipt is already cancelled</i>	
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)

				(33)

Access Code: 816

Function: Booking-additionals Reciept-Repetition

Handling of booking-datas in the TAF – additional for Reciept-Repetition

LL07	LL05	L03	LL27	LM01	LM02	LM04	LM05	LM03	LM25	LM23	LM60	LE61	LE70
2/a		2/a	2/a	2/a	2/a	2/a	2/a/e				2	2	2

Command

see Access Code 800

Note: The response message of Access Code 816 is sent in acknowledgement to a command message request using Access Code 800 to access "Checkout-Slip and Collection-Slip amounts" in a transaction file record.

Response

N	1	RSP	1,3d	(1)
N	5	Code	816d	(5)
F	4	Control	Access|Key|Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)
N	3	Record Type	14d = Booking-Additional	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N(C)	2	Operator Number	1 - 99d, 'SS', 'PP'	(2)
N	1	Booking/Cancellation	0 - 1d <i>0d = booking 1d = cancellation</i>	(1)
N	11	base price	+/- 0 - 9999999999d	(11)
N	11	Tare	0 - 99999999999 <i>Tara in [g] ohne Komma</i>	(11)
N	1	Tare type	0 - 1d <i>0 = tare offset 1 = tare default</i>	(1)
N	11	Gratis-ammount	0 - 99999999999 <i>without decimal point</i>	(11)
N	11	Gratis-weight / quantity	0 - 99999999999 <i>weight in [g] without decimal point</i>	(11)

F 4 Article-Flag

(4)

Bit	Meaning	Value	Rem.
0	Weigh-/Non-weigh PLU	0 = Weigh 1 = non-weigh	
1	Price overwrite	0 = no 1 = yes	
2	Special Offer (!! disabled !!)	0 = no 1 = yes	
3	Special Offer reserved	0 = no 1 = yes	
4	Block article	0 = no 1 = yes	
5	Enable discount	0 = no 1 = yes	
6 – 7	Don't care		
8 – 9	Traffic Light Smiley	00 = without 01 = green 10 = red 11 = depending on margin	only for L2
10-11	Product-Text	00 = without 01 = show on the Display 10 = print on the receipt	
12	kind of weight	0 = measured weight, 1 = manual weight oder scanned weight	
13	Don't care		
14-15	Decimal places for the weight	00 = 3 Decimal Places (Standard) 01 = 2 Decimal Places 10 = 1 Decimal Places 11 = no Decimal Places	

(94)

Access Code: 817

Function: Delivery Note Bookings - MIRA Cash Register

Accessing delivery note bookings data

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 LM25 LM23 LM60 LE61 LE70
2/a/e 2/a/e

Command (delete, cancel) /

N	1	CMD	0d	(1)
N	5	Code	817d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
	N	2	Scale Number	0 - 64d (2)
N	3	Selection Control	0 - 4d	(3)
			<i>Delete:</i>	
			0 ⇒ delete individual delivery note (only cancelled)	
			1 ⇒ delete all delivery notes	
			2 ⇒ delete all closed delivery notes	
			3 ⇒ delete all cancelled delivery notes	
			<i>Cancel:</i>	
			4 ⇒ cancel individual delivery notes (only closed)	
C	13	Customer Number	ASCII Numbers	(13)
N	4	Receipt Number	0 - 9999d	(4)
			-----	(36)

Response (delete, cancel)

N	1	RSP	1,3d	(1)
N	5	Code	817d	(5)
F	4	Control	Access | Key | Status	(4)
			for Commands 1, 2, or 3	
			Status as in Standard list	
			for Commands 0 or 4	
			(Individual deletion, Individual cancellation)	
			0d = delivery note cancelled /deleted	
			1d = delivery note not found	
			2d = delivery note is already cancelled	
			3d = delivery note closed / cancelled	
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	3	Selection Control	0 - 4d	(3)
			<i>delete:</i>	
			0 ⇒ delete individual delivery note (only cancelled)	
			1 ⇒ delete all delivery notes	
			2 ⇒ delete all closed delivery notes	
			3 ⇒ delete all cancelled delivery notes	
			<i>cancel:</i>	
			4 ⇒ cancel individual delivery notes (only closed)	
C	13	Customer Number	ASCII numbers	(13)
N	4	Receipt Number	0 - 9999d	(4)
			-----	(36)

Access Code: 821**Function: Supplementary Info: E-Cash for MIRA, Cash Register**

For card payments, additional information required to be able to allocate a card reader receipt to a cash register receipt

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 LM03 2/a/e LM25 LM23 2/a/e LM60 LE61 LE70

Command

see Access Code 800

Note: The response message of Access Code 821 is sent in acknowledgement to a command message request using Access Code 800 to access "Electronic Cash Parameters" from a transaction file record

Response

N	1	RSP	1,3d	(1)
N	5	Code	820d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Number	0 - 999d	(3)
N	3	Record type	15d = E-Cash	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N (C)	2	Operator Number	1 - 99d	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			<i>d = booking</i>	
			<i>1d = cancellation</i>	
N	8	Terminal-ID	0 - 99999999d	(8)
N	4	Terminal Receipt No.	0 - 9999d	(4)
N	6	Trace Number	0 - 999999d	(6)
N	3	Card Type	01 - 38d	(3)
			<i>01 = ec card</i>	
			<i>02d = ec card (Magnetic strip) offline (ELV)</i>	
			<i>03d = ec card (Magnetic strip) (PoZ/OLV</i>	
			<i>04d = ec card (Magnetic strip) online</i>	
			<i>06d = EuroCard</i>	
			<i>07d = EuroCard offline</i>	
			<i>08d = EuroCard online</i>	
			<i>11d = American Express</i>	
			<i>12d = American Express offline</i>	
			<i>13d = American Express online</i>	
			<i>16d = Visa</i>	
			<i>17d = Visa offline</i>	
			<i>18d = Visa online</i>	
			<i>21d = Diners</i>	
			<i>22d = Diners offline</i>	
			<i>23d = Diners online</i>	
			<i>26d = JCB</i>	
			<i>27d = JCB offline</i>	
			<i>28d = JCB online</i>	
			<i>31d = ec card with chip</i>	
			<i>32d = Cash card</i>	
			<i>34d = ec card with Chip online</i>	
			<i>36d = Maestro</i>	
			<i>37d = Maestro offline</i>	
			<i>38d = Maestro online</i>	

(66)

Access Code: 822

Function: Shortcode

Evaluate TAF-Records Einträge for the Shortcodes

LL07 LL05 L03 LL27 LM01 LM02 LM04 LM05 2/a/e LM03 2/a/e LM25 2/a/e LM23 2/a/e LM60 not for LE61 LM03 LE70 LM23

Command

see Access Code 800

Note: The response message of Access Code 822 is sent in acknowledgement to a command message request using Access Code 800 to access "Electronic Cash Parameters" from a transaction file record

Response

N	1	RSP	1,3d	(1)
N	5	Code	822d	(5)
F	4	Control	Access | Key | Status	(4)
N	4	Department	0 - 9999d	(4)
N	2	Scale Number	0 - 64d	(2)
N	4	Receipt Number	0 - 9999d	(4)
N	2[3]	Date	dd / mm / yy	(6)
N	2[2]	Time	hh / mm	(4)
N	3	Position Nummer	0 – 999d	(.3)
N	3	Record-Typ	16d = Shortcode	(3)
N	4	Department Number	1 - 9999d	(4)
N	2	Scale Number	1 - 64d	(2)
N (C)	2	Operator Number	1 - 99d	(2)
N	1	Booking/Cancellation	0 - 1d	(1)
			<i>0d = booking</i>	
			<i>1d = cancelation</i>	
N	3	Shortcode-No.	0 – 100d	(3)
N	6	PLU-Number	0 – 999999d	(6)
N	7	Weight	0 – 9999999d	(7)
			<i>without decimal point</i>	
N	7	Number of units	0 – 9999999d	(7)
C	6	Shortcode-Text		(6)

				(74)

V Revision History

Modifications implemented from 07.02.94 to 06.04.94

SG: Some Access Codes (209, 211) know diff. sizes, always to be used as the 1st sequence in the line: char(5) (□) as command, '0' to '9' as size

Code	Modifications
200	only one map in the network (department /dev. 0)
201	conf.-flag ...
208	date-flags
209	block-no. f. rd-cmd. ...
229	key-no. has 4 digits (max. remains 100 !)
230	ean-Fld.br.: 1d = wide
233	abt-key's/-no's
237	rep.flag.
243	date-flags
401	strg. only 0002 (RD)
402	strg. only 0002 (RD)
407	strg. only 0002 (RD)
412	key for rd-cmd.
800	VAT. app.
813	strg-meaning wg. cancellation/del.

Modifications implemented from 06.04.94 to 11.05.94

Code	Modifications
6 K	new
221 K	2nd text
223	SO state corr.
231 K	upd.
246 K	new (246, 248, 249, 250, 251, 253 also)
403	strg. only 0002 (RD) (405, 411, 412 also)
409	upd.
500-512	department -/dev.-# upd., bed. No.: 'SELF-SERVE', 'PRE-PACK'
500	vx-zusätze: auf/ab entf.;
502	'SO ums/ums.' 3 digits
512	zahl.mittel: upd.
517 K	new (518, 519, 520, 596 also)
801	upd. (802 .. 806 also)
<1.>	RMS appended

Modifications Implemented from 11.05.94 to 05.12.94

Communication Structure

The use of CTL Bytes changed for Access Codes 2XX.., 4XX.., 5XX.. and 8XX. Users were advised to refer to the corresponding 'Definition of Access Control' at the beginning of each Access Code functional group.

Definitions for LF (line feed) and FS (font size) can be found on page 4.

New and modified Access Codes

Code	Modifications
200	net-mode, device-type
201	tickets, adv.ord., flag 11-13
202	printout mode, flag 2-14 (tare)
210	DEL only if no PLU associated
211	
214	
215	
216	
217	no DEL-ALL
221	surch./red. val. 5-digits
223	status 8
225	status 8
230	gr.-obj ext., bte-textsize,
239	proc. 6
242	new
246	flags ext.
248	function-key, length
251	length
252	new
255	new
256	new
403	RD only
404	shop clerk - no. 'PRE-PACK' 'SELF-SERVE'
408	piece turno. not in weight
411	RD only
500	control definition: invent.turno., access
500	rec-Type 9 + 10
511	sellingType 2 + 3
512	sellingType 2 + 3, recType 9 + 10
520	reportType 2, device-no.
521	new
522	new
523	new
524	new
596	deleted, see 252
598	deleted, see 236
616	new
801..806	no cmd, only rsp
801	seelingtype
809	department/device-no.
811	new
812	new

Appendix:

E_STX 216

Modifications Implemented from 05.12.94 to 06.12.96

Fundamental changes

Becoffe the LP/M scales support some of the ID's only partial or not at all, the main reason for this update is to illustrate the differences by using the id's with L2 or LP/M scales. All this differences are either marked with „L2“ behind the ID (when the ID can't be used with LP/M scales at all) or with marks for the lines in the description of the ID (this part of the ID works with L2 scales, but not or only in a restrictes way with LP/M scales).

Code Modifications

260	new
261	new
262	new
266	new
267	new

Modifications Implemented from 22.01.1997 to December 2000
--

Code Modifications

201	Sum of bytes for Command (create or modify) corrected from 47 to 45
207	Staggered prices / Mark-ups / Discounts / Discounts / Special Offer Disabling implemented for MIRA
208	New meaning for bit 15 of Date Strike-Through Flags for L2 Appl. 03 and 27
214	Supplement "only for EAN8 and EAN13" introduced
216	„Shift-key allocation “only for L2“ set
220	MIRA Advertising Texts increased from 1 to 9
222	Access Codes for MIRA Cash Register application released
231	Reference made to Access Code 276 for EU currencies
233	Additions to MIRA keyboard types / Definition of Hex values for function keys enhanced
236	Two sales levels for MIRA
237	Two closing of sales configurations for MIRA
239	"Note" explaining that this Access Code only takes effect on the scale connected directly to the PC
248	Additions to MIRA keyboard types / Definition of Hex values for function keys enhanced
246, 250, 251, 252, 255, 256, 261, 269, 270, 500, 508, 512	Access Codes for MIRA Cash Register application released
261	Additional keys introduced for Secondary Currency, Delivery Note, Wholesale (weight in kg), Electronic Cash, 2 nd Price Key, and Direct Text Keys
267	Additions to EAN legends and EAN128
4XX	MIRA: Two sales levels
401	Special Offer sales information included in MIRA
412	Text "Weight- / Quantity Sales" changed to "Sales in Weight"
5XX	Mira: 2 Sales Levels
505	Text "Weight- / Quantity Sales" changed to "Sales in Weight"
506	Text "Weight- / Quantity Sales" changed to "Sales in Weight"
507	Text "Weight- / Quantity Sales" changed to "Sales in Weight"
512	Additional record type for Electronic Cash
New Access Codes	
269	Direct Text can be allocated to a PLU / L2 (only APP 27 !)
270	Direct-Text create / L2 (only APP 27 !)
271	Create Account Number / L2 (only APP 27 !)
272	Definition of account sales levels / L2 (only APP 27 !)
273	Deletion of Account sales / L2 (only APP 27 !)
274	Euro Configuration
275	Load Printer Logo / MIRA (only Appl 03 and 05)
276	Payment Methods EU Currencies (Cash Register)
277	User Configuration enhancement for MIRA
278	Order data (MIRA, Cash Register)
279	Scale Configuration enhancement for MIRA
280	Customer Data (MIRA, Cash Register)
283	E-Cash Terminal Configuration (MIRA, Cash Register)
530	L2 (only APP 27 !) / Sales Report - Accounts
531	L2 (only APP 27 !) / Summary Report Account Sales on label
532	Orders (MIRA, Cash Register)
533	Delivery note data (MIRA, Cash Register)
817	Delivery Note Bookings (MIRA, Cash Register)
821	Additional Information on Electronic Cash (MIRA, Cash Register)

Modifications Implemented from December 2000 to June 2001

Code Modifications

203, 206, 207, 208, 209, 210, 227, 228, 229, 278, 280, 533
 changed the Header-Text for the function from ...file to ...data

201 In flag values, text for bits 1, 2, 14 and 15 modified.

202 changed the descriptions for printout-values, in flag 2 Bit 8 – changed the meaning to “quick serve”

223, 224, 225, 226
 modified the Header-Text for the function

236, 598 added for “sales type” the options if the TAF is deleted or not

230 Text revision, modification of abbreviations

246 modified the Header-Text for the function

249 modified the Header-Text for the function, changed “control” to 0d – write only

251 parameters for “control” changed to 0d - (Lock / Unlock with an automatical Journal-print is not supported)

261 complemented keyboard-types, complemented and corrected the Definition tables for function key allocation and special function key allocation

277 complemented in the table for User configuration additional 1 the lines for Bit 6 to 12 – complemented the field “reference column for direct-texts on the receipt”

279 increased the Range for “No. of delivery note customers” from 0 - 1000d to 0 - 2000d
 inserted the field „No. of Shortcodes“

280 complemented in the table for Konf.-Flag Bit 3 „list closed delivery notes in the cash register sales report“

500... changed for all Access Codes from block 500 the first line to “RSP” with values 1,3d and reworked the layout

512 completed missing Header for EC-Cash, complemented new Record-Type 12 for Shortcode

533 complemented new Record-Type 12 for Shortcode

New Access Codes

285 Keyboard configuration LP (additional direct-text-keys)

286 not documented – concerns Index-Files for PLU's (Tesco Czechoslovakia)

287 Shortcode Data - Create the Shortcode-Datas (No, Text, Directtext assignment, Quantity)

288 Shortcode Assignment for a PLU - Shortcode Assignment for an article (PLU)

289 Shortcode sales datas – read / delete the sales-datas for the Shortcode-Numbers

816 Booking-additionals Receipt-Repetition

822 Shortcode - Evaluate TAF-Records for the Shortcodes

VI Appendix - Setup Parameters, Log files and Error Messages

TransL2 (16-Bit) Setup Parameters

The parameters listed are saved in the TRANSL2.CFG file. Any parameters not listed will be automatically extracted from the TRANSL2.CFG file when the TransL2 program is started. **If the TRANSL2.CFG file is not placed in the TransL2 directory, default values are automatically assumed.**

Param.	Name	Range	Default Value	Remarks
-c	<C>hannel	COM1 /COM2	COM1	
-b	audrate	1 / 19200	9600	
-d	<D>atabits	7 / 8	8	
-p	<P>arity	n:no, e: even, o: odd	n	
-s	<S>topbits1 / 2	1		
-t	<T>imeout [sec.]	1 to 255	30	On a PC, about 10 times that of the setting on channel A on the scale
-l	<L>ogfile	0: off / 1: on <filename>	off / transl2.log	Example: -lolist.log
-z	Number of lines in Logfile	1 to ...	99	Limited only by file size
-f	config-<F>ile	<filename>	transl2.cfg	Example: -fmodem.cfg
-m	<M>odem-linitstring		AT &D2 S0=0 E0 Q0 V1	Initialise Modem
-a	Modem Di<A>Istring		ATDP>W074311 4358	Dial the number of the other station
-u	Modem Hang<U>pstring		ATH	Hang-up upon completion of data transfer
-r	modem-<R>econnect	0: enable / 1: disable	0=enable	-r1 ⇒ Hang-up string is not automatically sent as soon as processing of Inputfile is complete ⇒ Telephone connection should be terminated using a TransL2 command or manually
-i	<I>nputfile			File with COMMAND entries, used instead of stdin
-o	<O>utputfile			File with RESOPNSE entries, used instead of stdout
-w	verbose mode			Displays TransL2 status information in line [w] / only for parameter -i, -o / -w0 ⇒ not for status lines
-n	bi<N>ary bitmap	-n Dep Dev-Nr File		Only for L2 for the sending of Logos to the label printer. To be used separately.
-e	<E>nforce-file	0: no / 1: yes	0: no	-e1 ⇒ TransL2 uses the In/ Outputfile contained in the TransL2.cfg file / stdin, stdout and Terminal mode are not available
-q		<filename>		Use of a simplified protocol file (Bizerba structure) / these parameters are not compatible with all TransL2-versions
-k	Transferscope	1: PLU incl. Fix Key / 0: PLU without Fix Key update	0: PLU without Fix Key update	Only for the T_L2_LI.EXE program

If TransL2 is not started by STDIN, STDOUT or an In/Output file but from a DOS command line, the program then runs in direct Terminal Mode. In this mode, the program can be ended by simply inputting a ^Z (CNTRL Z).

If COMMANDS to be used are stored in a file, the name of the file can be entered in the command line, after TransL2, with the character > (STDIN). The REPOSE from the scales can then be entered into a file using the character < (STDOUT). Instead of using STDIN and STDOUT, it's possible to use the -i and -o parameters (input and output file).

Status Line for TransL2 (16-Bit) / Parameter -wxx

If TransL2 (16-Bit) is run using input and output files, the following status line can be displayed using the parameter –wxx, where xx is the line:

METTLER TransL2 1.24 H 512 @ #M 15 #B 7 #W 3 Q 0
--

The contents of the status line fields are interpreted as follows:

- TransL2 1.24 ⇒ TransL2 Version
- H 512 ⇒ The Access Code currently being used (in this case 512)
- #M xxxxxx ⇒ Number of command lines in <<INFILE>>
- #B xxxxxx ⇒ Number of response lines in <<OUTFILE>>
- #W xxxxxx ⇒ Timeout of the scale sent (see LOG entry r: |□32E-3□ ...; e.g. in Access Code 200)
- Q x ⇒ Evaluation of all STATUS byte values at the end of the data transfer
- 0 ⇒ all response entries have Status 0
- 99 ⇒ at least one response entry has a non-zero Status

To stop displaying the Status Line, start TransL2 with the Parameter –w0

TransL2 (32-Bit) Setup Parameters

TransL2 (32-Bit) can be installed into any directory by running SETUP.EXE found on the installation disk. After installation, the directory contains the TransL2.EXE and SETUP.EXE programs. Running SETUP.EXE allows the TransL2 (32-Bit) setup parameters to be specified.

The screenshot shows the 'Setup TransL2 parameters' dialog box with the 'Port' tab selected. The dialog has four tabs: Port, Modem, Logging, and File. The 'Port' tab contains the following settings:

Parameter	Value
Device	COM1
Baudrate	9600
Databits	8
Parity	none
Stopbits	1
Timeout	5

On the right side of the dialog, there are two buttons: 'OK' (with a green checkmark icon) and 'Cancel' (with a red X icon).

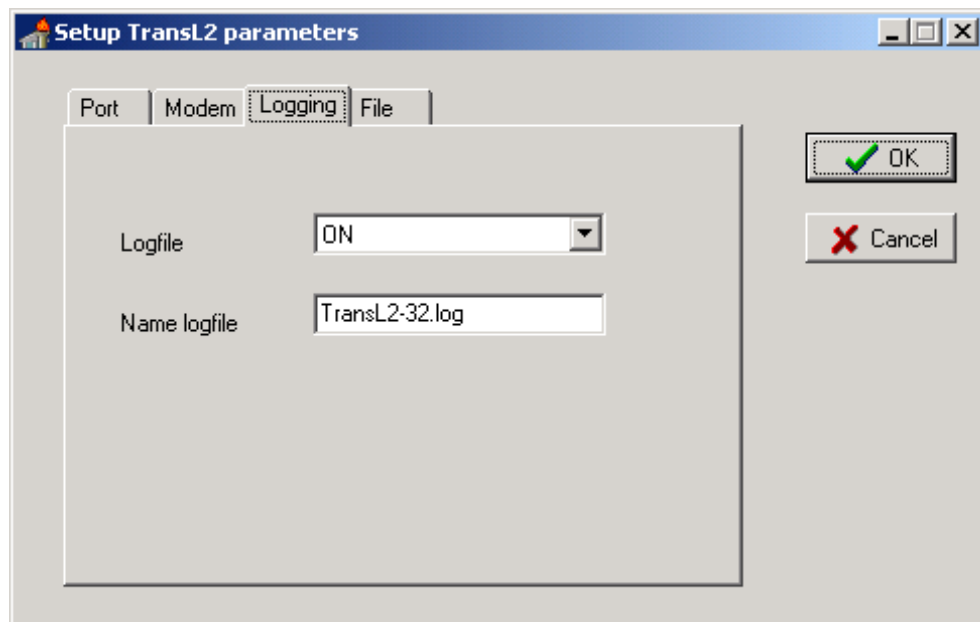
- Device: COM-Port to be used by TransL2 (32-Bit) (COM 1 to 9)
- Baud rate: The data transfer rate (1200 to 19200)
- Data bits: The number of data bits (7 or 8)
- Parity: Parity can be none, even or odd
- Stop bits: Number of stop bits (1 or 2)
- Timeout: The time the PC waits before issuing a timeout error message
- Baud rate, Data bit, Parity and Stop bit settings should match those for channel A (B for L2) of the scale

The screenshot shows the 'Setup TransL2 parameters' dialog box with the 'Modem' tab selected. The dialog has four tabs: Port, Modem, Logging, and File. The 'Modem' tab contains the following settings:

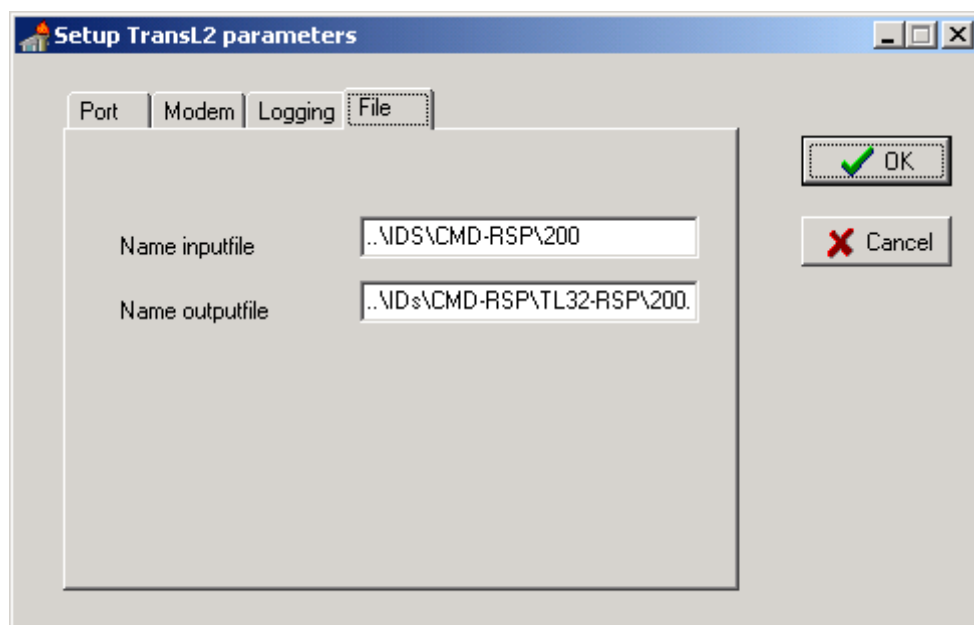
Parameter	Value
Initializationstring	ATMOLO
Dialstring	ATDT
Hangupstring	ATH
Timeout	90

On the right side of the dialog, there are two buttons: 'OK' (with a green checkmark icon) and 'Cancel' (with a red X icon).

- Setting modem parameters
- to activate this modem-strings TransL2 (32 Bit) has to be started with parameter "-m"



- Setting Log file parameters
- **WARNING: In TransL2 (32-Bit), the maximum size of the log file is unlimited. When LOG FILE is set to ON, the size of the file increases with each transfer of data!**



- Path and file name for INPUT and OUTPUT files

All parameters set are saved in the **TRANSL2.INI** file in the **Windows root directory**. With the above parameter settings, the contents of this file are as follows:

```
[init]
device=COM1
data bits=8
stop bits=1
parity=none
baud rate=9600
timeout=5
[modem]
timeout=90
init=ATM0L0
dial=ATDT
hang-up=ATH
[file]
input=..\IDS\CMD-RSP\200
output=..\IDS\CMD-RSP\TL32-RSP\200.out
[log file]
file=TransL2-32.log
active=ON
```

If TransL2 is not started by STDIN, STDOUT or an In/Output file but from a DOS command line, the program then runs in direct Terminal Mode. In this mode, the program can be ended by simply inputting a ^Z (CNTRL Z).

If the COMMANDS to be used are stored in a file, the name of the file can be entered in the command line, after TransL2, with the character > (STDIN). The RESPONSE from scales can then be entered into a file using the character < (STDOUT). Instead of using STDIN and STDOUT, it's possible to use the -i and -o parameters (input and output file).

Setup parameters can be entered directly into the TRANSL2.INI file residing in the Windows root directory (i.e. without the need to use SETUP.EXE). This allows the following parameter values to be entered:

Param.	Name	Range	Default Value	Remarks
-c	<C>hannel	COM1 /COM2	COM1	
-b	audrate	1 / 19200	9600	
-d	<D>atabits	7 / 8	8	
-p	<P>arity	n:no, e: even, o: odd	n	
-s	<S>topbits1 / 2	1		
-t	<T>imeout [sec.]	1 to 255	30	On a PC, about 10 times that of the setting on channel A on the scale
-m	<M>odem-linitstring		AT &D2 S0=0 E0 Q0 V1	Initialise Modem
-a	Modem Di<A>lstring		ATDP>W074311 4358	Dial the number of the other station
-u	Modem Hang<U>pstring		ATH	Hang-up upon completion of data transfer
-i	<I>nputfile			File with COMMAND entries, used instead of stdin
-o	<O>utputfile			File with RESPONSE entries, used instead of stdout
-e	<E>nforce-file	0: no / 1: yes	0: no	-e1 ⇒ TransL2 uses the In/ Outputfile contained in the TransL2.cfg file / stdin, stdout and Terminal mode are not available

Setup Parameters for TransArc (only for .exe and not for .dll)

The TransArc program can only be used when a Mettler-Toledo ArcNet-Card has been installed in an ISA slot of the respective PC. A valid TranArc license number must exist on the card. To use the card with 32-bit operating systems, the card should be registered in the registry using the TARCINST program. More information on installing and configuring the ArcNet Card can be found in the installation instructions included in the delivery.

The parameters listed are saved in the TRANSxxx.CFG file. Any parameters not listed will be automatically extracted from the TRANSxxx.CFG file when the TransARC program is run.

If the TRANSxxx.CFG file is not placed in the Transxxx directory, default values are automatically assumed.

Param.	Name	Range	Default Value	Remarks
-l	<L>ogfile	0: off / 1: on <filename>	off / transl2.log	Example: -l0list.log
-z	Number of lines in Log file	1 to ...	99	Limited only by file size
-f	config-<F>ile	<filename>	transl2.cfg	Example: -fmodem.cfg
-i	<I>nputfile			File with COMMAND entries, used instead of stdin
-o	<O>utputfile			File with RESOPNSE entries, used instead of stdout
-w	verbose mode			Displays TransL2 status information in line [w] / only for Param. -i, -o / -w0 ⇔ not for status lines
-s	TafSort	0: off / 1: on		Exclusively for Mitreva software

TransArc and TransLPe cannot be used in Terminal Mode. Hence, COMMANDS must be saved in a file, where the file name is entered after Transxxx with the > (STDIN) character or the -ixxx parameter in the command line. The REPONSE from scales must similarly be saved to a file, using the < (STDOUT) character or the -oxxx Parameter.

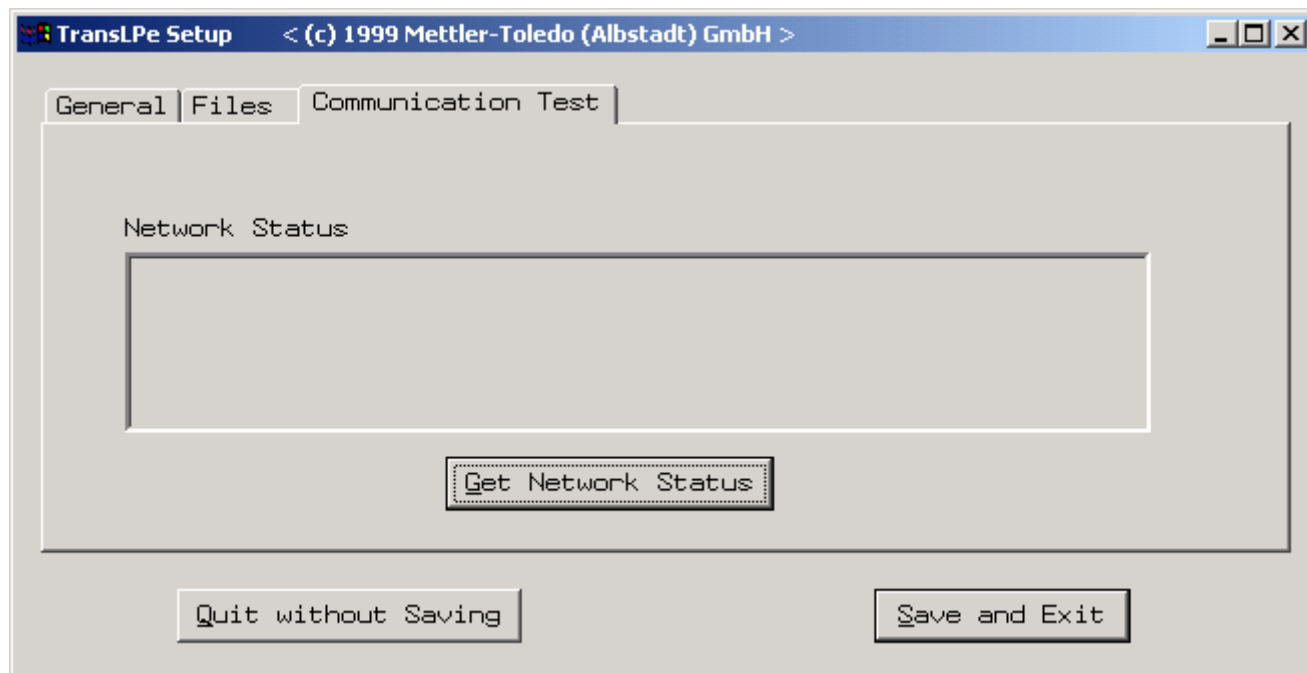
Configuration of TransLPe Using SETUP.EXE

The TransLPe directory contains a SETUP.EXE file, which allows TransLPe to be configured using the below listed masks. Parameters entered are saved in the files TRETHNET.CFG and TRETHNET.CFG.

- IP-Address ⇒ IP-OFFSET – the IP address of the MIRAE network (without a leading 0!)
- Error Log file ⇒ Error – activate log file
- Transaction Log file ⇒ Activate transaction log file for Access Code 512
- IP-Range ⇒ Range from IP-OFFSET to highest scale number (IP-Range for Trethnet = IP-OFFSET + IP-Range)
- Report Timeout ⇒ Maximum time allocated for the retrieval of reports
- Send Timeout ⇒ Maximum time allocated for an ACK from the scales in response to command strings from PC

As soon as one of the two Log files becomes active, a DEBUG window is displayed while data is transferred!

- Input File ⇒ File containing command strings
- Output-File ⇒ File in which response strings are saved
- Logfile ⇒ The file name of the log file
- Line Count of Logf. ⇒ maximum number of lines stored in the log file
- Logfile tick box ⇒ Log file activate / de-activate
- Enforce File Usage ⇒ Enforces the use of input and output files



- Get Network Status ⇒ Requests the network status (Access Code 5) to test communication

With the above settings, the configuration files have the following content:

trethnet.cfn	trethnet.cfg
<pre> ; *** TransEthernet Configuration *** -I192.168.64.200 -X2 -T55000 -S1 -R63 </pre>	<pre> ; *** TransEthernet File Setup *** -I1 trethnet.log -z999 -ic5 -oc5.rsp -e1 </pre>

Direct Command Functions for TransArc and TransLPe DLLs

The following functions have been written for use with the DLL versions of the TransArc and TransLPe programs (v1.02 onwards). The functions correspond with functions used internally in TransArc and TransLPe.

The functions are listed below:

TransArc	TransLPe	Remarks
OpenArcNet()	OpenEthNet(),	<ul style="list-style-type: none"> parameter input is not supported In order to open the port, the TRXXXXXX.CFN file must be located as described in the TransArc documentation. returns an integer value Value 0 ⇒ no error Value -3 ⇒ no communication possible (in this case, close() is executed automatically) Value -7 ⇒ license violation
CloseArcNet()	CloseEthNet(),	<ul style="list-style-type: none"> parameter input is not supported no response returned used to close the communications ports
TarcWrite()	EthWrite() and	<ul style="list-style-type: none"> uses a string pointer as parameter, which refers to the COMMAND string used returns an integer value Value 1 ⇒ Response (XXXread()) expected Value 0 ⇒ Write procedure error
TarcRead()	EthRead().	<ul style="list-style-type: none"> uses a string pointer as parameter, which refers to the expected response string the string has to be long enough to be able to receive the expected response (corresponding to this documentation) returns an integer value Value 0 ⇒ Read procedure was successful Value 201 ⇒ Read procedure error

The use of TransArc and TransLPe with I/O files is recommended, particularly for retrieving reports.

With direct calls, the calling application has to continue receiving responses (Read()) until the last record from TransArc or TransLPe has been sent (e.g. 10051200060000000255).

A C-language Example:

```

...
char  szTx[1024];
int   nRet;

...
if ((nRet = OpenxxxNet()) != 0)
    return(nRet);
...
if (xxxWrite("0000050000000000") == 1)
    nRet = xxxRead(szTx);
...
ClosexxxNet();
...

```

LOG FILE Entries

The following table describes typical **TransL2-Log file** (transl2.log) entries.

Entry	Description
curr. line: [300]	returns the line number of the most recent LOG FILE entry (using ring buffer / First in First out)
COM1 opened on Mon Jul 05 15:50:02 1999	COMx-Port was opened at this time and date
param.: 9600 8 N 1 [0]	interface parameter, used by Transxxx
MDM {AT&FE0} MDM [| 0] MDM [OK| 2] MDM [| 3] MDM {atx3dt0,,0209137151} MDM [| 0] ... MDM [CONNECT 9600| 3] MDM [| 4] ...	when transferring data using a modem (only for TransL2), the connection procedure is as follows: MDM {AT&FE0} ⇒ Initialisation MDM [| 0] ⇒ Counter MDM [OK| 2] ⇒ Init. o.k. MDM {atx3dt0,,0209137151} Dial string MDM [CONNECT 9600| 3] Line active
w: |□0000050000000000□{C: 6}| l: <19 | 0>	The command line is made up as follows: w: | ⇒ write: (command) □ ⇒ STX (StartOfText) 0000050000000000 ⇒ ,Access Code command □| ⇒ ETX| (EndOfText) {C: 6}| ⇒ Checksum as number l: <19 ⇒ Length < ... character | 0> ⇒ Error code
r: |□0000050000000000....□{C: 6}| e: <0> k: <0>	The response line is made up as follows: r: | ⇒ read: (response) □ ⇒ STX (StartOfText) 0000050000000000.... ⇒ Access Code response □| ⇒ ETX| (EndOfText) {C: 6}| ⇒ Checksum as number e: <0> ⇒ Error code <0> no error; otherwise corresponding to the Error-Definitions k: <0> ⇒ Keyboard <0> disabled further responses follow <1> enabled; last response received
r: |t[E 216][rc 0|0]z ... [E 216][rc 0|0]| e: <216> k: <0/1>	The response line is made up as follows: r: | ⇒ read: (response) t ⇒ randomly received character [E 216] ⇒ error 216 [rc 0|0] ⇒ ready for check byte z... ⇒ randomly received character [E 216] ⇒ error 216 [rc 0|0] ⇒ ready for check byte e: <216> ⇒ error code <216> see Error Codes k: <0/1> ⇒ Keyboard enabled <0> disabled further responses follow <1> enabled; last response received
r: |□32E-3□{C: 77}| e: <0> k: <0>	Timeout counter ⇒ Scale message that the data server task is still preparing the response only for TransL2 / TransL2-32)
COM1 closed at Mon Jul 05 15:50:49 1999	COMx port was closed at this time and date

The following entries are logged in a **TransArc-Log file** (transarc.log):

- TransArc opened at Tue Nov 21 16:39:43 2000
- TransArc closed at Tue Nov 21 16:39:44 2000
- In the 16-bit .exe version, records still contain "w: ..." or "r: ..." as in TransL2, however without STX, ETX and BCC.

Error Codes

All error codes begin with 02 followed by the error number

Error Coder	Symbol	Meaning	Example
02 201	E_RD	read	Scale did not respond with the reply record within the expected timeout, perhaps the interface-timeouts have to be changed (default is scale 3 and PC 30 sec.)
02 202	E_RDT	read timeout	Scale answered with ACK ('thanks'), but it didn't send the response in the expected time
02 203	E_OVR	buffer overflow	
02 204	E_CHK	crc-chk	Check sum error, leading to lost character or bit corruption ⇒unreliable connection?
02 205	E_OPN	open dev	Interface cannot be opened ⇒ Is another process blocking the specified COM-Port?
02 206	E_WR	write	Scale does not send an ACK ('acknowledge') ⇒ Hardware, Parity, Baud rate?
02 207	E_WRT	write timeout	PC can't send the command via the Interface ⇒ operating-system, COM-Prot-settings, COM-Prot used?
02 208	E_EOT	end of transmission	Check sum error, leading to lost character or bit corruption ⇒unreliable connection?
02 209	E_NWR	unable to write	
02 210	E_NAK		Scale detected an error in a record and requests a re-transmission (maximum 3 x before aborting)
02 211	E_CLO	close dev	
02 212	E_STB		
02 213	E_I OG	ioctl g	
02 214	E_I OS	ioctl s	
02 215	E_ LOG	logfile open	
02 216	E_STX	start for text	The expected did not arrive - buffer not cleared; Wait for scale RS232 reset (approx. 1 min.)
02 300	E_INF		
02 901	E_CDO	command line err	
02 902	E_USR	user interrupt	
02 E-1	syntax-err	syntax error	E.g. Record length, department number, scale number
02 E-4	RDALL BUSY		

Glossary of Terms and Concepts

Account Customer (German: **Lieferscheinkunde**)

Typically a large customer that does not pay upon collecting goods. Instead, the customer receives an invoice which states all items bought and the amount of money owed. The customer can then settle the payment later (e.g. by bank credit transfer, direct debit, etc.).

Advertising Text (German: **Werbetexte**)

Text that is entered stored under an Advertising Text Number and can be printed out on labels.

Article Group (German: **Warengruppe**)

Numbered sub-folders stored under Departments. Article groups contain PLUs.

Basket Number (German: **Körbchennummer**)

Typically used in German butcher shops. A number assigned to a customer who accumulates items from different counters and pays for them at one till by handing in Checkout Slips. Note, a basket is not always used. (see Checkout Slip).

Blocked PLU

A seasonal PLU item that can be seasonally blocked (i.e. be made inaccessible). This feature prevents an operator from wrongly calling up a PLU item that is no longer in season (i.e. currently not sold).

Block Pricing (German: **Mengenpreis**)

Block Pricing allows a User to enter staggered prices that are additional to the normal base price or piece price of a given PLU article.

The prices are referred to as Block Prices because they only apply within blocks of weight values or ranges of piece quantities (depending on whether the PLU article is Weightwise or Piecewise).

Hence, using two Block Prices involves entering a lower limit (the weight or no. of pieces at which the first Block Price begins to apply), a second limit (the weight or no. of pieces at which the 2nd Block Price begins to apply) and the Block Prices themselves.

Alternatively, gratis amounts of the article can be given away when a certain lower limit of weight or no. of pieces is exceeded. E.g. above 800g, 100g is given away gratis.

Example 1. Staggered Block Pricing.

A butcher sells ground beef at a price of 15,00 DM per Kg. He decides to introduce a block price of 10,00 DM per Kg for the weight range 500g to 800g, and to introduce a 2nd block price of 8,00 DM per Kg for amounts above 800g.

So, A customer buying 400g will pay $0.4 \times 15,00 \text{ DM} = 6,00 \text{ DM}$

A customer buying 650g will pay $0.65 \times 10,00 \text{ DM} = 6,50 \text{ DM}$

A customer buying 900g will pay $0.9 \times 8,00 \text{ DM} = 7,20 \text{ DM}$.

Example 2. Gratis Block Pricing

The same butcher changes his mind and decides to use a gratis Block Pricing for the same article. Being generous, he would like every customer that buys more than 500g of his ground beef to get 200g gratis.

So, A customer buying 400g will pay $0.4 \times 15,00 \text{ DM} = 6,00 \text{ DM}$

A customer buying 650g will pay the same as if he was buying 500g, $0.5 \times 15,00 \text{ DM} = 6,50 \text{ DM}$

A customer buying 800g will actually pay for 600g, i.e. $0.6 \times 15,00 \text{ DM} = 9,00 \text{ DM}$.

A customer buying 1000g will actually pay for 800g, i.e. $0.8 \times 15,00 \text{ DM} = 12,00 \text{ DM}$

Branch Name (German: **Filialtext**)

The name of a retail outlet (i.e. a particular store). This name can be printed out on receipts and is always used in sales reports.

Checkout Slip (German: **Warenbon**)

Mostly used in butcher shops and bakeries in Germany. Such shops often have several counters and typically include a cafe where food obtained can be eaten on the spot.

During busy periods, an incoming customer would pick up a numbered basket or would simply be allocated a basket number (the basket number is a transaction number) and be served at several counters. The customer places the items obtained in the basket and receives a checkout slip from each counter visited. These slips are printed out by the scales where transactions for the basket number are booked. The customer is free to eat at the cafe and items obtained there are also booked under the same basket number.

When checking out, the customer hands in his slips to the cashier. The cashier will already have the total amount owed for the basket, so there is little chance that any items will remain unpaid. When all items are paid for, the checkout slip transaction is deleted.

Checkout slips are not always used during quiet periods where shop staff can see what the customer is up to.

At the time of closing, all checkout slips are cashed up and deleted. This must happen daily.

Collection Slip (German: Vorbestellbon)

Used typically for a customer who places an order and will collect and pay for the goods later. This customer will be issued with such a receipt showing items ordered and what they cost. They can also be used for customers who take items and will pay for them later.

Confidence Text (German: Kompetenztext)

Text associated with a PLU that provides the customer with useful information and tips on the product being weighed. The text also relieves the sales assistant of having to know information by heart about the items being sold and therefore gives confidence to both sales assistant and customer.

E.g. "The skin on this fruit is poisonous. Do not eat it."

Confidence Text Number (German: Kompetenztextnummer)

A number that refers to a particular string of stored Confidence Text. By assigning one or more of these numbers to a PLU article, Confidence Texts can be assigned to the PLU article.

Default Department (German: Prioritäts Abteilung)

The department in which the scale software is in upon switching on.

Department (German: Abteilung)

An area of non-volatile memory on a scale or scale network that stores article groups containing PLUs of an actual department in a retail outlet. Departments can be thought of as numbered folders in which the sub-folders are article groups are stored.

Typical departments are: Meat & Salami, Cheese, Fruit & Veg etc.

Department Keys (German: Abteilungstasten)

Used to access external PLUs. One of these keys is pressed and then the PLU code is entered. These keys are configurable.

Durability Text (German: Datumstexte)

Text stored under a Durability Text Number, which can be printed out on labels. Examples of such text are:

"Use by," "Best before," "Best Until," "Sell by," "Packed on," etc.

Durability Text Number (German: Datumstexte Nummer)

A number referring to stored durability text.

EAN Code Number

A number referring to a stored EAN 13 barcode.

External PLU

An external PLU is a PLU that is not stored in the default department of the scale.

PLUs are stored under folders called department numbers. It is common for different department numbers to be stored on different scales. It is also possible for the same scale to contain several department numbers.

In a scale network, a PLU stored under a department on one scale can be accessed by another scale in the network.

Fix Key

Normally, a tare value or article price not saved in a preset key, or associated with a PLU, is automatically deleted a few seconds after it was used (i.e. after the weight is removed). The fix key allows the value to be saved temporarily. The value is deleted the next time the Fix key is pressed.

Example of use:

The sales assistant notices that the customer behind the one she is currently serving has the same non-PLU item in his basket as the one she is currently entering into the scale.

To avoid the item from disappearing when the current transaction is concluded, the sales assistant chooses to temporarily save it by pressing the Fix key.

Gratis Block Pricing (German: Mengenpreis Gratis)

See Block Pricing.

Large Font Receipt Text

Text that is roughly double the height of the standard font used.

Menu Access Code – MAC (German: Code)

A code number used to access a menu. Some of these code numbers can be changed.

Minus PLU

The ability of a PLU to take in negative amounts of money. This feature enables a refund on a PLU item purchased.

Operator Keys (German: Verkäufertasten)

A convenience feature for operator logging on and off the scale, or for associating an operator with a sale. A single key is used to store an operator code number. The end result is that each operator has his or her own key to press on the keyboard when logging on or off the scale.

Order Mode (German: Bestellmode)

A mode that contains the functionality necessary for items to be ordered and collected later. This functionality also includes the issuing of Collection Slips.

Organisation Name (German: Firmentext)

The name of the retail organisation. This name could be printed on labels.

Primary Tare

A default tare value used in self-serve scales. This value is saved in non-volatile memory and if enabled is utilised automatically when the scale is switched on. E.g. this feature would be used when the same container is always used on a self-serve scale platter.

Quick Serve (German: Schnellbedienung)

A feature used in scales with only one operator. A receipt is printed out as soon as a PLU is accessed and a weight is on the scale (i.e. there is no need to press any enter key to book the transaction). Of course, it is not possible for the scale to calculate amounts of change to give back to customers in this mode.

Pictograph (German: Pictogramm)

A small graphic symbol which is inserted into the pocket of a self-serve keyboard overlay. Such symbols allow the user to quickly locate the article being searched for.

(e.g. colourful symbols for bananas, oranges, apples etc.)

Piecewise PLU (German: Stück PLU)

A PLU that has no weight associated with it. Such an item is sold as a piece (e.g. a loaf of bread).

Receipt on Label ((German: Bon auf Etikett)

A label printed with a receipt number. This results in the transaction being saved in the journal and cancellation being possible.

Reporting Level

A frequency at which a sales report is compiled. Different levels can exist (e.g. daily, every other day, weekly, monthly).

The levels are independent of each other in the sense that if a daily report is printed out and that area of memory is now deleted, the data for that day will still be intact in the weekly report and monthly report.

Roving Operator (German: Durchbedienung)

A feature of networked scales in which a sales assistant is allowed to serve the same customer from different scales. The transaction can be concluded on one scale where only one receipt or Checkout Slip is printed out.

Advantages are: receipt paper is saved, the assistant is free to use a scale that is positioned locally to the item he or she is selling (i.e. there is no need to walk back to the same scale the transaction was started on).

Total Label

A label typically used in German butcher shops. The label is used to seal a bag containing various items and shows the total amount of money to be paid at the checkout.

Sales Categories (German: Erlösart)

A feature used for adding detail to sales transactions so that they would show up in sales reports. Categories can be entered into the System and stored under Sales Category Numbers. Sales transactions can later be assigned to these categories, enabling the User to see sales levels for the different categories used.

E.g. A butcher's shop contains a small cafe where cold cooked meats and sandwiches are sold. The butcher would like to see sales for his cafe separate to sales of the counter. So, he creates a new Sales Category called Cafe and assigns a key on the keyboard to this category.

Now whenever a customer pays for an item from the cafe, the butcher simply has to press the Cafe key to enter a sale for this area only.

Sales Category Number (German: Erlösartnummer)

A number referring to a stored Sales Category.

Sales Price 1 and Sales Price 2 (German: Verkaufspreis1 und 2, or VK1/ VK2)**Small Font Receipt Text**

The standard size of font used in the system.

Special Offer

A set of PLU articles that are temporarily offered at a reduced price for a specified time (from date, time to nearest hour to date and time to nearest hour). The lower price for each PLU in the set is entered when the special offer is created. The special offer has an associated name (e.g. Happy Italian Week).

Staggered Block Pricing (German: Staffelpreis)

See Block Pricing.

Tare Number

A number referring to a stored tare value.

VAT Number

A number referring to a stored VAT rate.

X-Report (German: Zwischenumsatz)

An intermediate sales report providing a snapshot of sales for the questioned period. The printing or listing of this report leaves all transactions in the transaction file intact (i.e. no transactions are deleted from memory when the report is compiled, listed and/or printed out). This feature is useful because it provides the User with feedback on how successful he, she or the outlet is, without deleting any memory.