

TS248

PC INTERFACE

通讯协议

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1. 命令字

ECR-PC		命令字
2	单条PLU数据上传	2
3	PLU库存数据上传	3
4	单个部类数据上传	4
5	单个收款员数据上传	5
6	单条头部信息上传	6
7	单条尾部信息上传	7
8	单条口味信息上传	8
9	单组系统标志上传	9
10	单个百分比数据上传	10
11	单条外币参数上传	11
12	COUPON信息上传	12
13	单个refund数据上传	13
14	单个支付方式上传	14
15	单个套餐上传	15
16	单条TAX数据上传	16
17	单个端口设置参数上传	17
18	单个KP设置参数上传	18
19	RP参数上传	19
20	单条礼券信息上传	20
21	单个促销参数上传	21
22	促销文本信息上传	22
23	按键描述符信息上传	23
24	预置现金数据上传	24
25	报表组数据上传	25
26	R模式可编程描述符上传	26
27	服务费参数上传	27
28	单条供应商信息上传	28
29	单条称重PLU信息上传	29
30	单条部门组参数上传	30
31	单个台组信息上传	31
32	通信下标子命令（信息）	Z
33	通讯连接命令	98
34	断开通讯命令	99
PC-ECR		命令字
1	重置所有的PLU(用在全部PLU下载前)	101

2	单条PLU数据下载	102
3	PLU库存数据下载	103
4	单个部类数据上传	104
5	单个收款员数据上传	105
6	单条头部信息上传	106
7	单条尾部信息上传	107
8	单条口味信息上传	108
9	单组系统标志上传	109
10	单个百分比数据上传	110
11	单条外币参数上传	111
12	COUPON信息上传	112
13	单个refund数据上传	113
14	单个支付方式上传	114
15	单个套餐上传	115
16	单条TAX数据上传	116
17	单个端口设置参数上传	117
18	单个KP设置参数上传	118
19	RP参数上传	119
20	单条礼券信息上传	120
21	单个促销参数上传	121
22	促销文本信息上传	122
23	按键描述符信息上传	123
24	预置现金数据上传	124
25	报表组数据上传	125
26	R模式可编程描述符上传	126
27	服务费参数上传	127
28	单条供应商信息上传	128
29	单条称重PLU信息上传	129
30	单条部门组参数上传	130
31	单个台组信息上传	131
25	删除单条PLU记录	200

2. 通讯流程概述

(1) PC下载数据到收款机

PC SIDE	DIRECTION	ECR SIDE	TIME-OUT PERIOD
ENQ	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
命令字包数据	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
下传带下标参数的包	→		
	←	ACK	10 sec. (Max)
下传带下标参数的包	→		10 sec. (Max)
	←	ACK	
EOF	→	结束本次通讯	

注意：下标从1开始

(2) PC获取收款机数据

PC SIDE	DIRECTION	ECR SIDE	TIME-OUT PERIOD
ENQ	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
命令字包数据	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
需要获取的参数的位置	→		
	←	ACK	10 sec. (Max)
	←	对应的数据信息	10 sec. (Max)
ACK/NAK	→		
需要获取的参数的位置	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
	←	对应的数据信息	10 sec. (Max)
EOF	→	结束本次通讯	10 sec. (Max)

NAK: ECR将重发数据,最多三次

注意：参数的位置从1开始

(a) 命令包信息如下:

STX +CMD + CS +ETX

Name	含义	数值
STX	Start Of Text	0x02
CMD	Command	命令字(含义根据情况变化)
ETX	End Of Text	0x03

(b) 参数的位置包信息如下

STX + Z + data + CS +ETX

Name	含义	数值
STX	Start Of Text	0x02
Z	Command(恒定命令字)	不变化
Data	数据区	不同包的数值不同
CS	累加和	见后面
ETX	End Of Text	0x03

(c) 数据包信息如下

STX + data + CS +ETX

Name	含义	数值
STX	Start Of Text	0x02
Data	数据区	每个字段以0x1c作为分隔符
CS	累加和	见后面
ETX	End Of Text	0x03

CS 计算:

从STX后的数据开始直到校验和之前的所有数据累加之和, 采用字节累加的形式得到的校验和取其十进制值的后两位的ASCII码即可得校验和.

例如:

STX +"1"+ ID + password+ PCCPV + CS +ETX

STX :0X02

CMD : 1

ID : A

Password : 1234

PCCPV : 1

发送数据位:

STX 31 1C 41 1C 31 32 33 34 1C 31 1C 32 31 ETX

$$CS = 0x31+0x1C+0x41+0x1C+0x31+0x32+0x33+0x34+0x1C+0x31+0x1C = 0xDD = 221$$

注意: 整个数据区都是ASCII码, 且每个字段之间用分隔符0x1C区别.

3. PC和收款机连接/断开通讯

1. PC和收款机开始通讯--系统配置信息同步检测,用户名,密码,版本号检测

PC	方向	ECR
ENQ	→	
	←	ACK
发送联机命令	→	
	←	ACK
参数包	→	
	←	ACK
	←	系统配置
EOF	→	结束通讯

注意：当PC上检测到系统配置信息与收款机不同时，PC上需要和收款机同步。
当PC上检测到系统配置信息与收款机不同时，需要发送断开连接命令给收款机
当PC和收款机开始通讯时，先发送此名字检测PC和收款机状态是否一致,PC上设置的用户名和密码是否可用，版本号是否可用。
参数包数据区域内容为：

ID + password+ PCCPV		
Name	含义	数值
ID	访问收款机的ID号码	先不检测
Password	访问收款机的密码	6位
PCCPV	版本控制信息	-- （先不检测）

2. 断开通讯

PC SIDE	DIRECTION	ECR SIDE	TIME-OUT PERIOD
ENQ	→		10 sec. (Max)
	←	ACK	
			10 sec. (Max)
发送断开连接命令	→		
	←	ACK	10 sec. (Max)
结束本次通讯	←	EOF	

在通讯结束时需要发送此命令到收款机

4. 收款机上传参数到PC

1. ECR上传单条PLU到PC

PC	方向	ECR
ENQ	→	
	←	ACK
命令包（2）命令	→	
	←	ACK
参数包(*****)	→	
	←	ACK
	←	PLU数据包
EOF	→	结束通讯

上传ECR没有的PLU数据: ECR反馈给PC ‘PLU不存在’.

参数包(*****):

单条PLU上传: 参数包为PLU条码

全部PLU上传: 参数包为PLU位置, 当收款机上已经没有PLU可发送给PC了,
则只需要检测PLU状态字段即可.

2. ECR上传单条部类信息到PC

PC	方向	ECR
ENQ	→	
	←	ACK
命令包 (4) 命令	→	
	←	ACK
参数包(上传部类号)	→	
	←	ACK
	←	部类数据包
EOF	→	结束通讯

全部上传部类时同此命令.

上传部类号用于确定上传的部类号.从1开始.

3. ECR其他信息上传到PC --参考部类上传

5. PC下传参数到收款机

1) 下载单条PLU数据到ECR

PC SIDE	DIRECTION	ECR SIDE	TIME-OUT PERIOD
ENQ	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
命令包 (102) 命令	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
带下标的PLU数据包	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
EOF	→	结束本次通讯	

注意: 下载全部PLU到ECR也采用此流程, 只是需要循环发送(带下标的PLU数据包).

注意空记录的传送: PC 端有N个PLU, 下载N次PLU数据到ECR, 不需要全部PLU都传送到ECR.

2) 重置全部PLU数据

PC SIDE	DIRECTION	ECR SIDE	TIME-OUT PERIOD
ENQ	→		10 sec. (Max)
	←	ACK	10 sec. (Max)

命令包（101）命令	→		
	←	ACK	10 sec. (Max)
结束本次通讯	←	EOF	

全部传送PLU数据到ECR时先发送此命令,再循环发送PLU数据到ECR.

PC 上删除单条PLU 与ECR的通讯

PC SIDE	DIRECTION	ECR SIDE	TIME-OUT PERIOD
ENQ	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
命令包（200）命令	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
结束本次通讯	←	EOF	

注意: PC上每次通讯前需要检查是PLU的删除记录中是否有数据,需要先传送需删除的PLU记录给ECR;
如果PC在删除PLU的时候与ECR通讯不成功,无需报错,需要将待删除记录保存等待下次与ECR通讯时将其发送到ECR以保证PC与ECR数据一致.

3) PC下载单条部类数据到ECR

PC SIDE	DIRECTION	ECR SIDE	TIME-OUT PERIOD
ENQ	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
命令包（104）命令	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
带下标部类数据包	→		10 sec. (Max)
	←	ACK	10 sec. (Max)
EOF	→	结束本次通讯	

全部部类下载采用同样命令.
部类下标用于确定更新的部类号.从1开始.

4) 其他参数下载均可参考部门下载

6. 数据规格说明

1) System configuration data

Index	Name	Type	Length (Bytes)	Notes	
1	Work mode	Numeric	3	0x55: retail 0xAA: hospitality	in retail mode, TABLE, C.M.,MENU can't be accessed.
2	Department number	Numeric	3	0~200	The ECR and PC must be the same number
3	Clerk number	Numeric	2	0~50	The PC must

					be more than the ECRs
4	Main Table number	Numeric	2	0-50	The ECR and PC must be the same number
5	Split Number	Numeric	1	0~5	
6	Modifier number	Numeric	4	0~7000	The ECR and PC must be the same number
7	PLU number	Numeric	5	0-30000	The PC must be more than the ECR
8	System dots	Numeric	1	0:0 1:0.0 2:0.00 3:0.000	The ECR and PC must be the same
9	Tax system	Numeric	1	0:ADD-ON TAX 1:VAT 2:GST-PST	The ECR and PC must be the same number

注意:

其中 部门数目, Modifier数目, 台数目, 系统小数点, 税系统 收款机和PC上必须保持一致.

工作模式不同, 只导致一些参数不能通讯.在零售模式, 口味, 套餐, 台编程是不能通讯的.

收银员数目, PLU数目, PC上可多于收款机上的数目, 但通讯的时候需要提示用户'PC和收款机不同步,

会造成数据丢失',同时需要将未通讯信息保存在错误日志中.

2) PLU stock data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Barcode	Numeric string	13	<input checked="" type="checkbox"/>		
2	Safety stock	Numeric	9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-99999.999 固定三个小数点
3	Stock	Numeric	9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-99999.999 固定三个小数点

Note: data format is Binary.

For all PLU stock, it will have 30 PLU each package.

3) PLU Preset data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Status	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0:有数据 1: 已经没有数据了
2	Barcode	Numeric string	13	<input checked="" type="checkbox"/>		
3	Price	Numeric	7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-999999 系统小数点
4	Price2	Numeric	7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-999999系统小数点
5	Price3	Numeric	7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-999999系统小数点
6	Deptartment No.	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~最大部门号
7	Name	Char string	18	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
8	Name2	Char string	18	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

9	a) PRICE FORMAT b) menu ** c) stock active d) IsCondiment** e) Exempt Service Tax** f) FS Tenderable	Numeric	6	<input type="checkbox"/>	<input type="checkbox"/>	a: PRICE FORMAT 0:OPEN (def) /1:PRESET PRICE b: menu 0:N(def)o/1: Yes c: stock active: 0:No(def)/1: Yes d: IsCondiment: 0:No(def)/1: Yes e: Exempt Service Tax:0:No(def)/1: Yes f: FS Tenderable 0:No(def)/1: Yes
10	Number of modifiers	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0~5
11	PLU Modifiers 1 Price	Numeric	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-999999 系统小数点
12	PLU Modifiers 1 quantity	Numeric	8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999.999(fixed 3 dots)
13	PLU Modifiers 1 Name	Char string	18	<input type="checkbox"/>	<input type="checkbox"/>	
14	PLU Modifiers 2 Price	Numeric	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-999999 系统小数点
15	PLU Modifiers 2 quantity	Numeric	8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999.999(fixed 3 dots)
16	PLU Modifiers 2 Name	Char string	18	<input type="checkbox"/>	<input type="checkbox"/>	

23	PLU Modifiers 5 Price	Numeric	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-999999 系统小数点
24	PLU Modifiers 5 quantity	Numeric	8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999.999(fixed 3 dots)
25	PLU Modifiers 5 Name	Char string	18	<input type="checkbox"/>	<input type="checkbox"/>	
26	Number of condiments	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0~12
27	Selection No. of condiments	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0~12,这个字段的值必须小于等于字段13的值
28	Condiments Member1 Barcode	Numeric string	13	<input type="checkbox"/>		
29	Condiments Member1 quantity	Numeric	5			1000~50000
30	Condiments Member2 Barcode	Numeric string	13	<input type="checkbox"/>		
31	Condiments Member2 quantity	Numeric	5			1000~50000
..					
40	Condiments Member12 Barcode	Numeric string	13	<input type="checkbox"/>		
41	Condiments Member2 quantity		5			1000~50000
42	CmNum	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0~6
43	CmIdx1	Numeric	3	<input type="checkbox"/>	<input type="checkbox"/>	0-最大口味
	
72	CmIdx30	Numeric	3	<input type="checkbox"/>	<input type="checkbox"/>	0-最大口味
73	Safety stock	Numeric	9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-99999.999 固定三个小数点
74	Stock	Numeric	9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-99999.999 固定三个小数点

在单条PLU通讯前,如果当前PLU设置了condiments,请先发送condiments PLU数据到收款机,避免上下不一致;
全部PLU的通讯则不需要此操作

每个调味品PLU的数量都是可选的, 范围是1-50, 但在通讯的时候需要X1000, 表示数量 (数量默认带三个小数位)

*库存:在更新库存时有三种更新方式: 增加/覆盖/减少

增加: 原有库存量+新输入库存量

覆盖: 新增加的库存量覆盖原有库存量

4) Dept. Preset Data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Dept No.	Numeric	3	<input type="checkbox"/>	<input type="checkbox"/>	1~200
2	Price	Numeric	8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	系统小数点
3	a):mode b):type c):halo d):age ef):Tax g): FS Tenderable	Numeric	6	<input type="checkbox"/>	<input type="checkbox"/>	a):mode 0:Standard/1:Gallon/2:Negative b):type 0:Normal/1:Single c):halo 1-7 d):age 0:Non/ 1:Age 1/ 2:Age 2 ef):VAT: 0-5 TAX:0~15 GST-PST:0~15 g):1:YES/ 0:NO(def)
4	Name	Char string	18	<input type="checkbox"/>	<input type="checkbox"/>	
5	a:group bc:KP de:KP2 f:PRICE FORMAT g:Kp format h:Tax Type	Numeric	8	<input type="checkbox"/>	<input type="checkbox"/>	a:0-9 bc:KP :0~14 de:KP2 :0~14 f: PRICE FORMAT 0:OPEN 1:PRESET PRICE g:Kp format: 0: Single item 1: Multiple items h:0:Fixed; 1:Variable

Tax Type: when the system tax is vat type, and system flag 'select vat type for dept' is YES, then this flag can modify, or it is 1: variable for default.

Fox example:

```

Dept No.      1
Price         1.23
mode          0:Standard
type          0:Normal
halo          7
age           0:None
Tax           00
FS Tenderable 0
Name          DEPT01
Group         0
KP            01
KP2           00
PRICE FORMAT  0: OPEN
Kp format     1: Multiple items
Tax Type      1: Variable

```

Data area: 1,1.23,70000, DEPT01,100011,

Hex : 31 1c 31 2e 32 33 1c 37 30 30 30 30 1c 44 45 50 54 30 31 1c 31 30 30 30 31 31

Note: 对应组合的数据需要从第一个不为零的位置开始.

If the data as following:

```

Group         0
KP            00
KP2           00
PRICE FORMAT  0: OPEN
Kp format     0: Single item
Tax Type      0: Fixed

```

Then data area will be: 1,1.23,70000, DEPT01, ,

5) Clerk Preset Data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Clerk number	Numeric	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~50
2	pass code	Numeric	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0~9999
3	Interrupt No.	Numeric	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0~99
4	Name	Char string	12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5	1) void 2) Discount 3) R.M. 4) RA/PO 5) PLU price list 6) Not Found 7) X report 8) Z report	Numeric	8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Limitation: 1:allow 0: not allow
6	1) Programming 2) Refund 3) coupon 4) Rcpt On/Off 5) EJ 6) Access TABLE 7) #NS 8) Voucher/Credit	Numeric	8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Limitation: 1:allow 0: not allow
7	1) Change payment 2) Comp 3) FOC 4) Payment	Numeric	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Limitation: 1:allow 0: not allow

6) Store header Preset Data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Store header number	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~5
2	Store header font	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:normal 2:double width 3:double height 4:Quadruple
3	Store header message	Char string	42	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

7) Footer logo Preset Data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Footer logo number	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~5
2	Footer logo font	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:normal 2:double width

						3:double height 4:Quadruple
3	Footer logo message	Char string	42	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

8) system status Preset Data

Status1	ABCDEFGH	
A	Print date on receipt	YES: 1(def) / NO: 0
B	Print time on receipt	YES: 1(def) / NO: 0
C	Print clerk on receipt	YES: 1(def) / NO: 0
D	Print Header on receipt	YES: 1(def) / NO: 0
E	Print Footer on receipt	YES: 1(def) / NO: 0
F	Print Blank line on receipt	YES: 1 / NO: 0(def)
G	Print Subtotal Amount on receipt	YES: 1(def) / NO: 0
H	Print Machine No. on receipt	YES: 1(def) / NO: 0

Status2	ABCDEFGH	
A	Print Receipt No. on receipt	YES: 1(def) / NO: 0
B	Print Tax amount on receipt	YES: 1(def) / NO: 0
C	Print Tax total on receipt	YES: 1(def) / NO: 0
D	Print item Tax code on receipt	YES: 1(def) / NO: 0
E	Print Vat analysis on receipt	YES: 1(def) / NO: 0
F	Print Vat No. on receipt	YES: 1(def) / NO: 0
G	Print Total Quantity on receipt	YES: 1(def) / NO: 0
H	Print Dept No. on receipt	YES: 1 / NO: 0(def)

Status3	ABCDEFGH	
A	Print Local Currency symbol	YES: 1 / NO: 0(def)
B	Print barcode when PLU sale	YES: 1 / NO: 0(def)
C	Picture LOGO print	YES: 1(def) / NO: 0
D	Print cover on receipt	YES: 1(def) / NO: 0
E	Print slip header	YES: 1 / NO: 0(def)
F	Print sign line	YES: 1 / NO: 0(def)
G	Print food stamp mark	YES: 1 / NO: 0(def)
H	Print average amount on receipt	YES: 1(def) / NO: 0

Status4	ABCDEFGH	
A	Print #/NS information	YES: 1(def) / NO: 0
B	(print the sale receipt)Receipt ON/OFF	0: OFF / 1:ON (def)
C	Consolidation same item RP	YES: 1 / NO: 0(def)
D	KP print R.M. item	YES: 1 (def) / NO: 0
E	Reprint receipt for R.M	YES: 1 / NO: 0 (def)
F	KP print Comp item	YES: 1 / NO: 0 (def)
G	Duplicate receipts allowed	YES: 1 (def) / NO: 0
H	Print bill after transaction void	YES: 1 (def) / NO: 0

Status5	ABCDEFGH	
A	Print bill after transfer table/combine table	YES: 1 / NO: 0 (def)
B	Print CM on receipt	YES: 1 / NO: 0 (def)

C	Position of receipt# print	0:Foot /1:Head (def)
D	Position of logo print:	0:Foot /1:Head (def)
E	Print items when close table	0:No(def)/1:All/2:Last List
F	Item descriptor at RP	0: English(def) 1: Chinese 2: Both
GH	reserve	0

Status6	ABCDEFGH	
A	Inventory function active	YES: 1 / NO: 0(def)
B	Zero price for Dept/PLU sale	YES: 1(def) / NO: 0
C	EJ features active	YES: 1(def) / NO: 0
D	Compulsory Declaration	YES: 1 / NO: 0(def)
E	Reset Grand Total after Z Report	YES: 1 / NO: 0(def)
F	Clerk System active	YES: 1 / NO: 0(def)
G	Clerk Logging in P mode	YES: 1 / NO: 0(def)
H	IButton Logon Active	YES: 1 / NO: 0(def)

Status7	ABCDEFGH	
A	Currency Symbol choice	YES: 1 / NO: 0(def)
B	Enable key tone	YES: 1(def) / NO: 0
C	Compulsory Clerk Declaration	YES: 1 / NO: 0(def)
D	Second Z Sales Report Active	YES: 1(def) / NO: 0
E	Used Gift delete when full	YES: 1 / NO: 0(def)
F	Select Vat Type for Dept	YES: 1 / NO: 0(def)
G	Label print automatically	YES: 1 / NO: 0(def)
H	Send data to CCTV	YES: 1 / NO: 0(def)

Status8	ABCDEFGH	
A	Not Found active	YES: 1 / NO: 0(def)
B	Not Found Prompt choice	YES: 1(def) / NO: 0
C	Consolidate the items on the KP	YES: 1 / NO: 0(def)
D	Cover function active	YES: 1(def) / NO: 0
E	Allow to trans void	YES: 1(def) / NO: 0
F	Allow to TSVD before suspend	YES: 1(def) / NO: 0
G	Allow to E.C. item before suspend	YES: 1(def) / NO: 0
H	Mark item more than 1 on kp	YES: 1 / NO: 0(def)

Status9	ABCDEFGH	
A	Clerk Pass code digits	0:3digits(def) 1:4digits
B	Rounding method	0:4/5(def)/1: up /2:down 3:special
C	Gift Voucher change	0:No return 1:Local currency(def) 2:Payment Media
DE	Line Feed Count	06(max -15)
F	VAT rate for Take-Away	0:Vat1/1:Vat2/2:Vat3/ 3:Vat4/4:Dept Vat(def)

G	VAT rate for In-House	0:Vat1/1:Vat2/2:Vat3/ 3:Vat4/4:Dept Vat(def)
H	VAT rate for Out-Of-House	0:Vat1/1:Vat2/2:Vat3/ 3:Vat4/4:Dept Vat(def)

Status10	ABCDEFGH	
A	PLU price for Take Away	0:None/1: Price1/ 2: Price2/3: Price3
B	KP Print Setting	0:Single items 1:Multiple items(def)
C	Enable key description refresh	YES: 1(def) / NO: 0
D	Change to tips need confirm	YES: 1 / NO: 0(def)
E	Food Stamp Rule	0: New Jersey(def) 1: illinois
F	Food Stamp Exempt Tax	YES: 1 / NO: 0(def)
G	PLU FS attribute active	YES: 1 / NO: 0(def)
H	Disc Calc Tax on Gross	YES: 1 / NO: 0(def)

Status11	ABCDEFGH	
A	Special RM active	YES: 1 / NO: 0(def)
B	%&refund with Service tax	YES: 1(def) / NO: 0
C	Report export device	0: UDisk(def) 1: SDCard
D	Duplicate receipt counter	0-9
E	Other Rounding Factor	0 : None (def) 1: Europe 2: Malaysia
F	Tax system	0: ADD-ON TAX (def) 1:VAT; 2:GST-PST
GH	RESERV	0

Status12	ABCDEFGH	
A	RM/NS data add to report	YES: 1(def) / NO: 0
B	VD/TSVD data add to report	YES: 1(def) / NO: 0
C	Clerk Rpt detail analysis	YES: 1 / NO: 0(def)
D	Allow Z Rpt When open Table	YES: 1 / NO: 0(def)
E	Print Machine# on report	YES: 1(def) / NO: 0
F	Print PLU barcode on report	YES: 1(def) / NO: 0
G	Print header on reports	YES: 1(def) / NO: 0
H	Print VAT No. on reports	YES: 1(def) / NO: 0

Status13	ABCDEFGH	
A	Cover data add to report	YES: 1(def) / NO: 0
B	Zero item skip for report	YES: 1(def) / NO: 0
C	Print the zero inventory	YES: 1(def) / NO: 0
D	Print the Z counter	YES: 1(def) / NO: 0
E	Print Total Transactions	YES: 1(def) / NO: 0
F	Compulsory PM Declaration	YES: 1 / NO: 0(def)

G	Comp report print Qty/Counter	0: Counter 1: Quantity(def)
H	RESERV	0

Status14	ABCDEFGH	
AB	Payment information display time	10(max 60s)
CD	Change info display time	10(max 60s)
EFG	Table color change time	255(max 255M)
H	Take out print tickets	2 (max 3)

Status15	ABCDE	
ABC	Maximum tips amount	0 (max 500)
DE	Logo select	0-11

Status16	ABCDEF	
ABCDEF	Training mode pass code	0-999999(123456)

Status17	ABCDEFGH	
ABCDEFGH	HALO	0-999999.99

Status18	ABCDEFGH	
ABCDEFGH	Total in drawer limit	0-999999.99

Status19	ABCDEFGH	
ABCD	Daily Z counter preset	0000-9999
EFGH	Periodic Z counter preset	0000-9999

Status20	ABCDEFGH	
ABCD	Receipt No. preset	0001-9999
EFGH	Machine No. preset	0001-9999

Status21	ABCD	
AB	Age limit1	16 (1-99)
CD	Age limit2	19 (1-99)

Status22	ABCDEFGH	
ABCD	happy hour Price2 start time	HHMM
EFGH	happy hour Price2 end time	HHMM

Status23	ABCDEFGH	
ABCD	happy hour Price3 start time	HHMM
EFGH	happy hour Price3 end time	HHMM

Status24	ABCDEFGH(happy hour days)	
A	Sunday	YES: 1 / NO: 0(def)
B	Monday	YES: 1 / NO: 0(def)
C	Tuesday	YES: 1 / NO: 0(def)
D	Wednesday	YES: 1 / NO: 0(def)
E	Thursday	YES: 1 / NO: 0(def)
F	Friday	YES: 1 / NO: 0(def)

G	Saturday	YES: 1 / NO: 0(def)

Staus25 ABCDEFGH - Table barcode

A Table barcode operate type

B Table bar prn after print list

C Table bar prn after suspend

D Table bar prn after Transfer

E Scale unit

F Tare type

GH reserve

0: Don't Surport; 1: Tender; 2: Open

0: NO; 1: YES

0: NO; 1: YES

0: NO; 1: YES

0:lb 1: oz

0:automatic 1:manual

0

Status26: Scale Depatrment 01(numeric,0-200)

Status27: Scale Depatrment 02 numeric,0-200)

Status28: Scale Depatrment 03(numeric,0-200)

Status29: Scale Depatrment 04(numeric,0-200)

Status30: Scale Depatrment 05(numeric,0-200)

Status31: Scale tare1 (numeric, 0- 599800)

Status32: Scale tare2 (numeric, 0- 599800)

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Status40: Scale tare10 (numeric, 0- 599800)

Staus41: Vat No (character,Max 15 bytes)

Status42:FTP mailer Name: (character,Max 14 bytes)

Status43:FTP mailer code: (character,Max 14 bytes)

Status44:FTP tenant code: (character,Max 14 bytes)

Status45:FTP IP: (character,Max 15 bytes)

Status46:FTP User Name:(character,Max 12 bytes)

Status47:FTP password: (character,Max 12 bytes)

9) Weighing PLU

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Weighing PLU No.	Numeric	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~11
2	Type	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0: Normal PLU; 1: Weighing PLU
3	Barcode length	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1-9
4	Weight/Amount	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0: Amount; 1: weight
5	Weight/Amount with check digit:	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0: No; 1: Yes
6	Decimal dots:	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0:0; 1:0.0; 2:0.00; 3:0.000
7	ID	Numeric	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-99

10) Cooking Message Preset Data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	C.M. number	Numeric	3	<input type="checkbox"/>	<input type="checkbox"/>	1~200
2	price	Numeric	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0~999999
3	Cooking Message	Char string	24	<input type="checkbox"/>	<input type="checkbox"/>	

11) Percentage Preset Data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	percentage number	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	1~8
2	Rate	Numeric	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0~99.999 (fixed 3 dots)
3	a: Attribute b: +/- Selection	Numeric	2	<input type="checkbox"/>	<input type="checkbox"/>	a: Attribute 0:After Item&Subttl/ 1:After Subttl/2:After Item/ 3:Locked b: +/- Selection 0:+% (def)/1:-%
4	Name	Char string	12	<input type="checkbox"/>	<input type="checkbox"/>	

12) Refund

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Refund number	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	1~8
2	price	Numeric	8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999999(system dots)
3	HALO	Numeric	8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999999(system dots)
4	Name	Char string	12	<input type="checkbox"/>	<input type="checkbox"/>	

13) Coupon program Preset Data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	price	Numeric	8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999999(system dots)
2	HALO	Numeric	8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999999(system dots)

14) FCE program Preset Data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	FCE number	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	1~4
2	a: Decimal b: symbol	Numeric	2	<input type="checkbox"/>	<input type="checkbox"/>	a: Decimal 0-3 b: symbol 1-7
3	Local	Numeric	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-99999(system dots)
4	FC	Numeric	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-99999(fc dots)
5	Name	Char string	12	<input type="checkbox"/>	<input type="checkbox"/>	

15) Payment Preset Data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Payment number	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	1~10

2	Change return	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0:No Return 1:Local currency 2:Payment Media
3	Duplicate number	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0-9
4	Changes to tips	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0:No; 1: Yes
5	Type	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0:Noraml 1:Credit 2: Debit 3:EBT
6	Name	Char string	18	<input type="checkbox"/>	<input type="checkbox"/>	

16) PCASH preset data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Pcash number	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	1~10
2	Price	Numeric	8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999999(system dots)
3	Type	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0-9 0: payment1/1: payment2/ 2:payment3/3:payment4/ 4:payment5/5:payment6/ 7:payment8/8:payment9/ 9:payment10
4	Name	Char string	12	<input type="checkbox"/>	<input type="checkbox"/>	

17) Service Tax

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Service Tax number	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	1
2	Name	Char string	12	<input type="checkbox"/>	<input type="checkbox"/>	
3	type	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0: fix 1:percantage
4	rate	Numeric	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0: fix 0-99999(system dots) 1:percentage:0-99.999
5	Start time#1	Numeric	4	<input type="checkbox"/>	<input type="checkbox"/>	HHMM
6	End time#1	Numeric	4	<input type="checkbox"/>	<input type="checkbox"/>	HHMM
7	Start time#2	Numeric	4	<input type="checkbox"/>	<input type="checkbox"/>	HHMM
8	End time#2	Numeric	4	<input type="checkbox"/>	<input type="checkbox"/>	HHMM
9	Sunday: Monday: Tuesday: Wendnesday: Thursday: Friday: Saturday:	Numeric	7	<input type="checkbox"/>	<input type="checkbox"/>	0:No; 1 : yes

18) TAX Preset Data

VAT:

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	VAT number	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	1~4
2	RATE	Numeric	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0~99.999%

GST-PTS:

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	TAX number	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	1~4
2	GST_RATE	Numeric	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0~99.999%
3	GST_LIMIT	Numeric	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0~999999
4	PST1_RATE	Numeric	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0~99.999%
5	PST1_LIMIT	Numeric	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0~999999
6	PST2_RATE	Numeric	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0~99.999%
7	PST2_LIMIT	Numeric	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0~999999(system dots)
8	PST3_RATE	Numeric	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0~99.999%
9	PST3_LIMIT	Numeric	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0~999999
10	TAX limit	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0: non gst , 1:Gst
11	No tax-on-tax	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0: no tax-on-tax 1:tax-on-tax 2: tax-on-tax-on-tax

TAX:

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	TAX number	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	1~4
2	type	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0: straight 1: tax table
3	ircnt	Numeric	2	<input type="checkbox"/>	<input type="checkbox"/>	0~63
4	rgcnt	Numeric	2	<input type="checkbox"/>	<input type="checkbox"/>	0~63
5	Breaks[1]	Numeric	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999(system dots)
.....	.....	Numeric	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999(system dots)
67	Breaks[63]	Numeric	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999(system dots)
68	Tax value[1]	Numeric	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999(system dots)
.....	.....	Numeric	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999(system dots)
130	Tax value[63]	Numeric	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999(system dots)

19) Menu Preset Data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Menu number	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	1~25
2	Price	Numeric	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0-999999(system dots)
3	Mode	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0:fixed 1:selectable
4	Vat	Numeric	2	<input type="checkbox"/>	<input type="checkbox"/>	0-4/0-15
5	child menu desc1	Char string	12	<input type="checkbox"/>	<input type="checkbox"/>	
6	child menu desc2	Char string	12	<input type="checkbox"/>	<input type="checkbox"/>	
.....	
16	child menu desc12	Char string	12	<input type="checkbox"/>	<input type="checkbox"/>	
17	Plu filed	Numeric string		<input type="checkbox"/>	<input type="checkbox"/>	mode: fixed max is 13*24 mode: selectabe max is 13*12*18 PLU quantity :1000-50000
18	Plu quantity	Numeric	2	<input type="checkbox"/>	<input type="checkbox"/>	
..	.....	Numeric string	<input type="checkbox"/>	<input type="checkbox"/>	

子套餐由原来的10个增加到12个，子套餐中的PLU数目有20个减少到18个。固定模式中PLU数目由50个减少到24个

注意：

每个PLU的数量都是可选的，范围是1-50，但在通讯的时候需要X1000，表示数量（数量默认带三个小数位）
Note:

If mode is fixed,menu PLU max is 24. if mode is selectable ,it include 12 child menu,each child menu has 1 description and 18 PLUs.

Because data is too big ,so we must sent it with sever packages. The data include two parts.

One:Index + Step(0) + mode+vat + Desc + Price + Desc1+... +Desc12

Other:Index +Step(1-12) + Menu Mode + PLU * 18(each package has 18 PLU barcode,Package max number is 13)

Index is menu No. (1-25)

Step(0-12),0 means send menu's attribute,1-12 means child menu No. if mode is selectable. When mode is fixed it means nothing.

Mode means menu mode ,0:fixed 1:selectable

Example:

(1) when mode is fixed.

```

Number:      1
Description:  Menu 1
Price        1
Mode         Fixed
Vat          2
PLU:         1X1000□2X1000□3X1000□4X1000□5X1000
Child description : None
Data transmitted:  Package 1:      1,0,0,2,"Menu 1",1,,,,,,,,,
                  Package 2:      1,1,0,1,1000,2,1000,3,1000,4,1000,5,1000,,,,,,,,,,,,,
                  Package 3:      1,2,0,,,,,,,,,,,,,
                  Package 4:      1,3,0,,,,,,,,,,,,,

```

(2)when mode is selectable

```

Number:      1
Description:  "Menu 1"
Price        1
Mode         selselectable

```

Child menu 1:description:"Selection 1"
 PLU: 1X1000,2X2000,3X2000,4X1000,5 X3000
 Child menu 2:description:"Selection 2"
 PLU: None
 Child menu 3:description:"Selection 3"
 PLU: None
 Child menu 4:description:"Selection 4"
 PLU: None
 Child menu 5:description:"Selection 5"
 PLU: None
 Child menu 6:description:"Selection 6"
 PLU: None
 Child menu 7:description:"Selection 7"
 PLU: None
 Child menu 8:description:"Selection 8"
 PLU: None
 Child menu 9:description:"Selection 9"
 PLU: None
 Child menu 10: description:"Selection 10"
 PLU: 3x1000,4 x1000,5 x1000,6 x1000,7 x1000,8 x1000
 Child menu 11: description:"Selection 11"
 PLU: None
 Child menu 12: description:"Selection 12"
 PLU: None

Data transmitted:

Package 1: 1,0,1,"Menu 1",1, "Selection 1" , "Selection 2" , "Selection 3" , "Selection 4" , "Selection 5" , "Selection 6" , "Selection 7" , "Selection 8" , "Selection 9" , "Selection 10" , "Selection 11","Selection 12"
 Package 2: 1,1,1,1,1000,2,2000,3,2000,4,1000,5,3000,,,,,,,,,,,,,
 Package 3: 1,2,1,,,,,,,,,,,,,
 Package 4: 1,3,1,,,,,,,,,,,,,
 Package 5: 1,4,1,,,,,,,,,,,,,
 Package 6: 1,5,1,,,,,,,,,,,,,
 Package 7: 1,6,1,,,,,,,,,,,,,
 Package 8: 1,7,1,,,,,,,,,,,,,
 Package 9: 1,8,1,,,,,,,,,,,,,
 Package 10: 1,9,1,,,,,,,,,,,,,
 Package 11: 1,10,1,3,1000,4,1000,5,1000,6,1000,7,1000,8,1000,,,,,,,,,,,,,
 Package 12: 1,11,1,,,,,,,,,,,,,
 Package 13: 1,12,1,,,,,,,,,,,,,

20) Port Preset Data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Port No.	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~5
2	Device Type	Numeric	8	<input checked="" type="checkbox"/>		0: None (无) 1: scanner (条码枪) 2: KP (厨房打印机) 3: CCTV 4: Scale (电子称) 5:PAX 7: RP(只有端口5可选择)
3	Baud Rate	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0 : 4800 1 : 9600

						2 : 19200 3 : 38400 4 : 57600 5 : 115200
--	--	--	--	--	--	---

21) KP preset data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Kp No.	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~13
2	KP type	Numeric	1	<input checked="" type="checkbox"/>		0-TM-88III(EPSON), 1-SRP-245(SAMSUNG), 2-TM-U220 (EPSON)
3	Head feed	Numeric	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-20
4	Foot feed	Numeric	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-20
5	Cut paper	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0: No ; 1:Yes
6	IP address seg1	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-255
7	IP address seg2	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-255
8	IP address seg3	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-255
9	IP address seg4	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-255
10	Port setting	Numeric	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999

22) Gift Certificate

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Gift No.	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~500
2	Amount	Numeric	8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-9999999(system dots)
3	Code	Character string	7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4	Status	Numeric	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	a) Useflag (1byte,0:No/1:Yes) b) Active (1byte,0:No/1:Yes)

5	Valid until	Numeric	8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	YYYYMMDD
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Note: Receive all information form ECR,PC send useflag=0 to ECR

23) RP preset data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	RP type	Numeric	1	<input checked="" type="checkbox"/>		0: TM-88III;1 : TM-U220; 2:58mm printer;3:80 mm printer

24) Key descriptor

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Key code	Numeric	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2	Description	Char String	18	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

按键列表:

Key descriptor setting					
键代码	英文	中文	键代码	英文	中文
21	clear	清除	152	With	添加
22	Staff	收银员	153	Without	去除
23	X	X	87	bill print	打印台单
25	Dept	部门	88	Active Tables	活动台
26	Dept Sale	部门销售	89	Floor Plan	图形台
27	PLU	PLU	91	Tabs	台
79	Detail	详单	92	Transfer to Tabs	转台
111	Confirm	确定	116	RA TABLE	预付款
112	Back	返回	117	COVER	人数
113	Dept List	部门列表	124	PLU price1	第一单价
114	Next	继续	125	PLU price2	第二单价
79	New Transaction	新的销售	126	PLU price3	第三单价
39	subtotal	小计	127	PR. Lock	价格锁定
133	Payment	支付方式	75	KP Reprint	厨打复打
41	Rcpt on/off	收据开关	76	Firing	Firing
43	Feed	走纸	77	Split Bill	分单
44	RA	入账	90	Split table	分台
45	PO	出账	128	Price	价格
50	RA/PO	入账/出账	129	Price Look Up	价格查询
46	Text	文本	100	MENU	套餐
48	Hold/Recall	挂单/调单	192	2X	2X
49	recall	调单	193	3X	3X
59	VOID	取消	194	4X	4X
60	R. M.	退货	195	5X	5X
61	E. C.	改错	196	6X	6X
62	Coupon	Coupon	197	7X	7X
63	Comp	Comp	198	8X	8X
64	Trans void	整笔取消	199	9X	9X
154	Tax1	税1	200	10X	10X
155	Tax2	税2	145	Voucher/Credit	礼券/购物券

156	Tax3	税3	78	Take Away	外卖
157	Tax4	税4	147	Entertainment	发票
158	non tax	免税	148	In House	室内
115	Not Found	添加PLU	149	Out of House	室外
130	DIGIT	数字输入	150	Credit Note	购物券
131	Receipt ReView	浏览收据	151	Gift Voucher	礼券
132	#NS	开钱箱	1817	Page Left	左翻
70	FCE	外币	1818	Page Right	右翻
81	Open Table	开图形台	190	Service Exempt(S)	免服务费(单项)
82	Store	挂台	191	Service Exempt	免服务费
83	Transfer to Table	转图形台	189	Change Payment	转款
84	Open Tabs	开台	93	SLIP	上菜纸
85	Combine	合台	94	TABLE LISTING	埋单
86	C.M.	口味	95	LAST TRANS	最后台交易
96	Not Send KP	不送厨打	69	FOC	免费
40	%	%	118	Payment Return	退款
201	HOME	首页	123	Credit Tips	小费
68	Tare	皮重			

25) Bundle PLU

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Bundle PLU number	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	1~80
2	Description	Char string	18	<input type="checkbox"/>	<input type="checkbox"/>	
3	type	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0-4
4	condition	Numeric	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0: amount /1:qty
5	qty/amt	Numeric	8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Qty:99 Amount:9999999
6	discount	Numeric	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(qty/amt/rate,99/99999/99.999
7	SamePluFlag	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0~1,1:some of Free PLU is same as PLUs
8	Active Numeric	Numeric	1	<input type="checkbox"/>	<input type="checkbox"/>	0~1,1:All the parameter are setting
9	Free_PLU(1)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
10	Free_PLU(2)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
11	Free_PLU(3)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
12	Membet PLUs (1)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
13	Membet PLUs (2)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
14	Membet PLUs (3)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
15	Membet PLUs (4)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
16	Membet PLUs (5)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
1217	Membet PLUs (6)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
18	Membet PLUs (7)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
19	Membet PLUs (8)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
20	Membet PLUs (9)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
21	Membet PLUs (10)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
22	Membet PLUs (11)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	
23	Membet PLUs (12)	Numeric string	13	<input type="checkbox"/>	<input type="checkbox"/>	

26) Bundle saving text

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Description	Char String	24	<input type="checkbox"/>	<input type="checkbox"/>	

27) Flash report

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Flash report No.	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1--5
2	Description	Char String	18	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3	Report1	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4	Report2	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5	Report3	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
6	Report4	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
7	Report5	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
8	Report6	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
9	Report7	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
10	Report8	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
11	Report9	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
12	Report10	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

28) Register Descriptor

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	String number	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2	Description	Char String	24	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

29) Supplier preset data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Supplier number	Numeric	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~20
2	Supplier Name	Char string	30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

30) dept group Desc

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Dept Group number	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~9
2	Dept Group Desc	Char string	12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

31) Table Group

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Table Group number	Numeric	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~10
2	Table Group Name	Char string	18	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3	Table Group Member01	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0~100
4	Table Group Member02	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0~100
...
...
21	Table Group Member19	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0~100
22	Table Group Member20	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0~100

32) Table Parameters

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Table number	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~100
2	Table Desc	Char string	12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3	Table key font color	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0~255
4	Table key fill color	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0~255
5	Price Level	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0: None(def) 1:price1 2:price2 3:price3
6	KP with red	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0:No(Def) 1:Yes
7	Exempt Service Tax	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0:No(Def) 1:Yes

33) Floor Plan Layout

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Floor Plan Layout number	Numeric	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~3,最多三层FLOOR PLAN布局
2	Floor plan table number	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1~100
3	First Key code	Numeric	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	901~1000, 0
4	First Key font color	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0~255
5	First Key fill color	Numeric	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0~255
6	First Key size	Numeric	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0x00/0x01/0x10/0x11/0x12/0x21/0x22/0x31/0x13
...
	36 th Key code					901~1000
	36 th Key font color					0~255
	36 th Key fill color					0~255
	36 th Key size					0x00/0x01/0x10/0x11/0x12/0x21/0x22/0x31/0x13

Note:

For the TS248, one floor plan layout have 36 keys, and TS3600 one floor plan has 66 keys.

Ts248 and TS3600 the floor plan has three layouts.

When the Floor plan table number is zero, then the other data can be zero. And it only need send once.

34) Screen Layout preset data

7. 报表数据

1. Daily full report(reserve the current mode,text data)

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Description	Char String	50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2	amount	Numeric	12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3	Quantity&Couner	Numeric	11			Quantity :11 bytes max, Contains Negative sign and decimal dot. Counter : 5 bytes max, donot contain Negative sign or decimal dot.

2. PLU report

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	PLU number	Numeric	13	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

3	amount	Numeric	12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	System dots
4	Quantity	Numeric	11	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Fixed three dots

The following report have the similar data type:

Menu PLU report

3.Dept report

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Dept number	Numeric	3	<input type="checkbox"/>	<input type="checkbox"/>	1-200
3	amount	Numeric	12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	System dots
4	Quantity	Numeric	11	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Fixed three dots

4.clerk report

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	clerk number	Numeric	3	<input type="checkbox"/>	<input type="checkbox"/>	1-50
3	amount	Numeric	12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	System dots
4	counter	Numeric	11	<input type="checkbox"/>	<input type="checkbox"/>	0-99999(no dots)

The following report have the similar data type:

Bundle report

Table report

Active table report

Menu report

5.hourly report

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Description	Char String	50	<input type="checkbox"/>	<input type="checkbox"/>	Description
3	amount	Numeric	12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	System dots
4	counter	Numeric	11	<input type="checkbox"/>	<input type="checkbox"/>	0-99999(no dots)

6.clerk logon report

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	Description	Char String	50	<input type="checkbox"/>	<input type="checkbox"/>	Description
3	Log in time	Char String	8	<input type="checkbox"/>	<input type="checkbox"/>	HH:MM
4	Lon out time	Char String	8	<input type="checkbox"/>	<input type="checkbox"/>	HH:MM

7. EJ Data

Index	Name	Type	Length (Bytes)	Negative	Dots	Notes
1	EJ data	byte	27			

Binary data,each package 27 EJ data.

```
Struct{
    Byte          LineType: 0 EJ head data; 1: EJ item data
    struct{
        word      EJ_Type;
        DATE      date;   YYMMDD
        TIME      time;   HHMMSS
        long      Rcpt_No; /*收据号*/
        byte      ClkNo;   /*收银员*/
        WORD      TblNo;   /*台号*/
        byte      Cover;   /*人数*/
        byte      IsTakeAway; /*是否是外送操作 */
        byte      IsClkIntrpt; /*是否是CLERK INTERRUPT 开台*/
        long      TtlAmt;
        WORD      RcptLen; /*存根大小*/
        WORD      Reserv;
    }EJ_HEAD; 26 bytes
    Strcut{
        byte      ID;      /* Indicate the operation,*/
        WORD      nth;      /* The transaction index number */
        long      price;    /* The transaction item price */
        long      Qty;      /* The transaction quantity */
        long      Amt;      /* The transaction item total amount */
        byte      TaxNo;    /* The transaction item tax No */
        byte      PerIdx;   /* The Percentage idx */
        TRANSFLAG flag;
        char      Reserv;
        char      BarCode[BAR_BUFF_LEN];
    }EJ_ITEM; 26 bytes
};

typedef struct{
    byte IsEC: 1;
    byte IsSerTax:1;
    byte IsEmpSerTax:1; /*当前系统是否在免服务费状态 */
    byte Reserve:5;
} TRANSFLAG;
```


8. 错误代码

1. No response from ECR for 10 seconds.
2. The response from ECR is 'NAK + STATUS CODE'.
3. The format of the data from ECR is illegal. (If you regard the data-format check as necessary.)
Status Code List(00-99)

Code	Contents
0	Normal
1	Password Error
2	ECR unconventionality
3	Time Over
4	Command Error
5	Data Error
6	Check Sum Error
7	PLU total quantity & quantity not blank
8	Not all the reports data is void
9	Work mode error
10	Department total quantity & quantity not blank
11	Same PLU index
12	The hard control lock scan not exists
13	Not in the VAT mode
14	Not in the Tax mode
15	PLU Attribute Error
16	Can't handshake,server is busy now
17	Can't communicate,server is busy now
18	PLU is not normal!
19	PLU is normal!
20	PLU is not exist!
21	The sale no end!
22	It is paying!
23	The report is clearing!
24	ECR and PC version is not match!