



- *WinPoS Keyboard Macro*
- *Technical Reference*
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## ISS45 WinPoS Keyboard Macro Technical Reference

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## ISS45 V7 KEYBOARD MACRO FILES (menusys.mac)

The menusys.mac file defines how the soft keys on the WINPOS terminal(s) are displayed. The menusys.mac is a text file, which is customized by the user. The file can be customized for a specific terminal, division or system. The text of the file is made up of various “codes” which define what is displayed on the WINPOS screen. The text file is converted to computer code by the dynaconv.exe executable. During each end of day the system will look to see if the version number of the menusys.mac has increased, if it has increased then the system will automatically run the dynaconv.exe. You can run the dynaconv.exe manual through the POSDOS screen. The dynaconv.exe will also run if you reboot the terminal.

### Menusys.mac Text Codes

#### VERSION

- This is the current version of the menusys.mac that is in use.
- This number is controlled by the user

#### STATE

- A STATE is a specific post situation, which opens a specific menu or menus. The menu that is opened is defined in the macro file.
- The STATE is the head of the hierarchy in the menusys.mac file.
- The application will call for a specific STATE and from there the menu defined in the macro will be displayed.
- Since the STATE is controlled by the application you cannot switch or create STATES unless it is supported in the application.
- There are specific STATES that are set aside for internal use such as STATE=81“README”.
- There are other STATES that are defined for a specific function such as STATE=84“TENDER CORRECTION”.
- STATE = 10 “\*\*\*\*ITEM ENTRY\*\*\*\*” is the sale state which is the main menu when the post is up i.e. the cashier is logged on.
- STATE = 29 “TOUCH-SCREEN IDLE” is the state in which the touch screen has the splash screen and then moves to the touch screen sign on features.
- STATE = 20 “ Tender Cashing: The list linked to this state will go into affect when the total key is pressed. **IF** Group=3 “Total” is to be used, it

calls PFUNC 906 from the applications keyboard programming (used in the case of a Total hard key) and will override State=20. Otherwise this is the tendering state.

### FCODES

- An FCODE is a function code
- They define either a user defined or post function
- FCODE can be under STATE, inlists, groups or other fcodes
- Certain Fcodes are set aside for specific functions  
FCODE 802 -992 are post functions  
FCODE 61-100 are functions used by the macro file application
- You can define your own FCODE using other numbers
- You can only switch or change user defined FCODE
- You can change the description of any of the pre-defined FCODES
- Global45 Function Calls follow the keyboard functions defined in the ISS45 Keyboard definitions.
- When using a defined keyboard function you cannot change the function numbers but can change the description

### PFUNC

- A PFUNC is a post function and is not usually edited.
- PFUNCs are user-defined keys relating to specific functions defined in the keyboard definitions.
- The user defines the keys in the keyboard programming in ISS45.

### GROUPS

- With groups we can define how menus, lists items departments are displayed.
- Groups can contain FCODEs, INLIST, INPUT and DATA

### DATA

- Data is the input for / what action is performed
- There are different types of data
  - 70 subtract

- 80 enter
- Rounding or value for a tender 4,909 for tender #4
- Specific item entry 9,0,0,6,80 for item number 9006

### INLIST

- An Inlist combines GROUPS, FCODEs, etc. to create a specific list. For example: INLIST 1 which is the department list is comprised of FCODEs, which are the departments. These FCODEs must match the department hierarchy in the application e.g. Department 1 = Grocery. FCODE 1001 = Grocery.

### LIST

- A list is a text file with an extension of .lst which is displayed as list on the soft key display. This could be a list of Bakery department PLU's for example. The call is created inside the macro file, but the .lst file resides outside of the macro in the same directory, c:\Program Files\POSWare\WINPOS

### INPUTS

- Inputs are the user-defined groups etc, which are displayed on the soft keys and cause the system to perform an action.

### MISC DEFINITIONS

- **VL or VL+** VL stands for value, it is meant to question if the value was entered prior to the key function usage. If value was not entered and VL+ is used (vs. VL) the data will be processed prior to displaying the input list.

The following line is an example of VL+. Here the dollar value entered into this department will have the Food Stamp flag reversed (,922) before the entry.

```
GROUP=11003 DESC="GM/FOOD" DATA=VL+,74,922 NEXT=F10003
INPUTS=*LOC,G10003
```

- **NEXT** When you want to have a choice if there was an entry prior to the use of the function key. This is used to achieve multi-pathing. For example, If you have a COUPON key function that selects the type of coupon *then* gives you the option to select coupon value, OR if you enter a

value when selecting the coupon key, the coupon selection menu will be bypassed using the VL/VL+ command and the NEXT. NEXT inputs will be chosen overriding the input list. See the following example:

```
GROUP=3000 DESC="STORE COUPON >" DATA=VL+,84,64 NEXT=I3  
INPUTS=G3025,G3050,G3075,G3100,G3200
```

- **HOME PAGE** This is used when you want to return to that position after operation is complete. The whole concept is based on state machine and POS application making the decision what state to drive to, this means that after each sale, the POS will direct the menu to move back to sale state. However, if during the keystrokes selection of the sale, one of the **HOME PAGE** was triggered, the last triggered **HOME PAGE** will override the POS sale state.

### Customizing the menusys.mac macro for DYNAKEY keyboards

Each new installation comes with a pre-defined menusys.mac file, which is then customized; to suit the specific needs of the customer. The menusys.mac file is found in the following directory on the WINPOS terminal.

C:\program files\posware\WINPOS\menusys.mac

Before changing the text of the menusys.mac the following should be remembered.

- You should define how you wish your menus to appear. (see later)
- The menus are defined in a tree structure where the base is  
STATE = 10 "\*\*\*\* ITEM ENTRY\*\*\*\*"item entry. This is always the main home page when clear is pressed
- You can create a "homepage" The system will automatically return to this point from a sub branch
- There are 8 displays, or SOFT keys on each Dynakey screen. These keys have a 16-character limitation. If your menu has more than 8 options the system will automatically insert "MORE" as the 8<sup>th</sup> option. Pressing "MORE" will bring up the next screen of options for the rest of your menu.
- Group like items under a header /\* Header\*/ for easy reference. For example all tenders should be defined together.
- Always remember the put " " when creating or changing a description
- If you wish to insert a blank menu option then use the FCODE=251.

- The menusys.mac has a version number. Each time you adjust the mac file you must change the version.

### **Customizing the menusys.mac macro for TOUCH SCREEN keyboards**

Each new installation comes with a pre-defined menusys.mac file, which is then customized; to suit the specific needs of the customer. The menusys.mac file is found in the following directory on the WINPOS terminal.

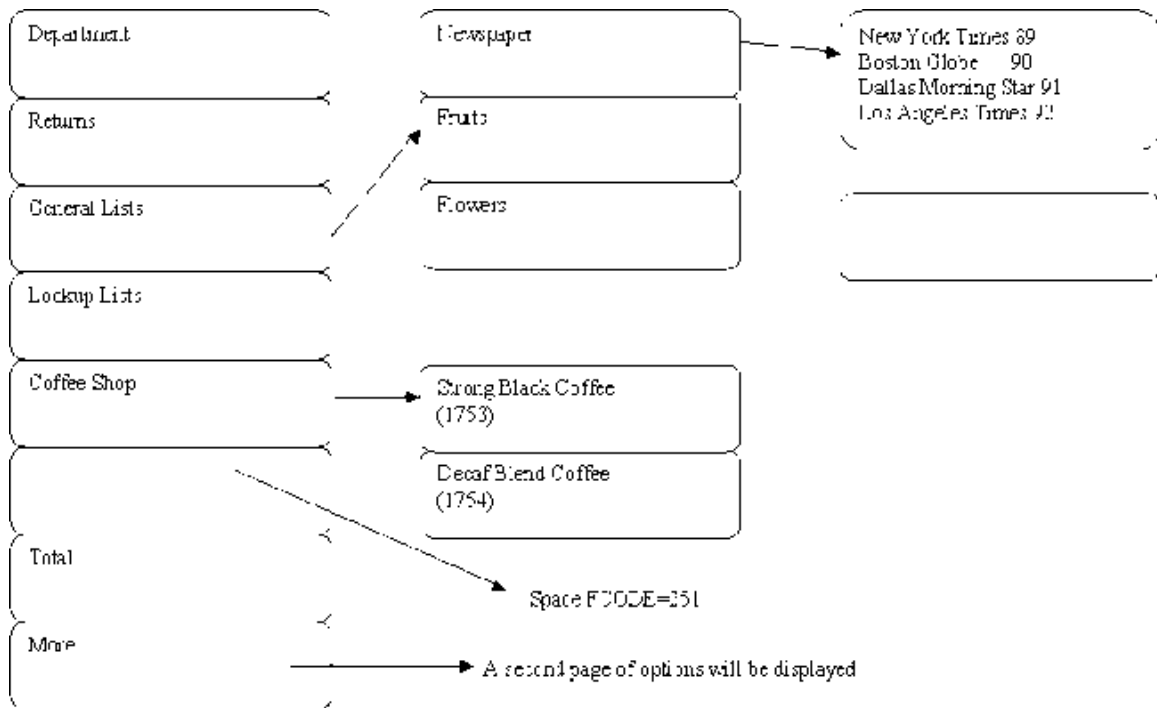
C:\program files\posware\WINPOS\menusys.mac

Before changing the text of the menusys.mac the following should be remembered.

- You should define how you wish your menus to appear. (see later)
- The menus are defined in a tree structure where the base is  
STATE = 10 "\*\*\*\* ITEM ENTRY\*\*\*\*" item entry. This is always the main home page when clear is pressed
- You can create a "homepage" The system will automatically return to this point from a sub branch
- There are 2 rows of 5 display, or SOFT keys in each row of the Touch Screen. These keys each have a 2 row of 8-character limitation. If your menu has more than 10 options the system will automatically insert "MORE" as the 10<sup>th</sup> option. Pressing "MORE" will bring up the next screen of options for the rest of your menu.
- Group like items under a header /\* Header\*/ for easy reference. For example all tenders should be defined together.
- Always remember the put " " when creating or changing a description
- If you wish to insert a blank menu option then use the FCODE=251.
- The menusys.mac has a version number. Each time you adjust the macro file you must change the version.
- The Touch Screen keyboard enables items to be shown in a .bmp format. The size requirement for the .bmp is 101 Wide and 52 High. The bmp files reside in C:\Program Files\POSware\WINPOS\Data\Images800\Macro\_Images. The bmp need to be combined in a GROUP / Inputs and the "picture" needs to be named as the GROUP=[#].bmp, e.g. Bananas are Group=41, so the bmp would be G41.

## Working Example

On a blank sheet of paper set out how you wish your menus to look starting from the main menu and then branching / drilling down to the next level where a specific action is to be performed or the next menu option is displayed.



The main menu above is the STATE=10 "\*\*\*\*\*ITEM ENTRY\*\*\*\*\*"

```
STATE=10 DESC="*****ITEM ENTRY*****"
INPUTS=G20,G2,G1000,G290,G200,G7000,F992,F906,G7002
```

Where G1000 is GROUP=1000 and F906 is FCODE=906 .

```
GROUP=1000 DESC="General List" INPUTS=L1,L2,G23,G24,G25,G26
```

We see that the group 1000 is an INPUT into the STATE 10 and that the GROUP itself has inputs L1 is LIST=1

```
LIST=1 DESC="Newspaper" FILE=Newspaper.LST
```

The list file newspaper.lst is a text file, which contains a list of items, in this case newspapers. The list is displayed when the soft key is pressed.

In the case of the Coffee shop we first access the Coffee shop list of items and then when we choose an item it is automatically rung up because the input for the group is the actual PLU number plus the enter key.

GROUP=200 DESC="Coffee Shop" INPUT=G9954,G9955 - This will show the Coffee Shop on the main menu, since GROUP=200 is in the INPUT of STATE =10

GROUP=9954 DESC="Strong Black Coffee"DATA=1,7,5,3,80  
GROUP=9955 DESC="Decaf Blend Coffee"DATA=1,7,5,4,80

FCODE=906 DESC="TOTAL" - when this is pressed it will total the order and bring up the tender menu.

When we press total the terminal enters the tender STATE=20 this provides the list of tenders available to be used.

STATE=20 DESC="\*\*\*TENDER CASHING\*\*\*"  
INPUTS=F91,F94,F93,F95,F96,G218,F70,F81

FCODE=91 is the first item in the inputs and will always appear in the first soft key displayed.

FCODE=91 DESC="CASH"  
INPUTS=G201,G202,G203,G204,G206,G207,G208,G209

The groups that make up the cash tender are as follows

GROUP=201 DESC="EXACT AMT \$ "  
DATA=+R0 , 91

GROUP=202 DESC="\$ "  
DATA=+R100 , 1 , 909

GROUP=203 DESC="\$ "  
DATA=+R500 , 1 , 909

GROUP=204 DESC="\$ "  
DATA=+R1000 , 1 , 909

GROUP=206 DESC="\$ "  
DATA=+R2000 , 1 , 909

GROUP=207 DESC="\$ "  
DATA=+R5000 , 1 , 909

GROUP=208 DESC="\$ "  
DATA=+R10000 , 1 , 909

GROUP=209 DESC="KEY CASH AMT HERE "  
DATA=1 , 909

The DATA input show the various options that are available  
+R0,91 shows the exact amount of the purchase as the first option.  
+R100,909 show the amount rounded up to the nearest whole dollar. Where 909 is the  
post function for tender as defined in the application, (see ISS45 Function Code  
document)

In summary the menusys.mac can be manipulated using the above codes to provide  
customized WINPOS menus.

## Appendix: ISS45 Function Codes

EXIT_POS	1
MENU	2
YES	3
CLEAR	4
2ZERO	5
PERF_TEST	6
BS	8
ENTER	13
NO	27
EXIT_FUNC	27
MUL (QTY)	42
DECIMAL	46
TAX EXEMPT ON/OFF	62
HIT 1ST, STORE CPN	64
HIT 1ST, VENDOR CPN	65
HIT 1ST, BONUS CPN	66
MDSE RETURN	67
VOID	70
TARE #	71
WEIGHT	72
CLEAR	73
PRICE	74
QTY #	75
NON-FOOD STAMPABLE	76
TAX/NON TAX	77
OVERRIDE	79
ENTER	80
TOTAL	81
PRICE ALTERNATE	84

KEY CHECK ID# HERE	90
CASH \$	91
CHECK	92
FOOD STAMPS \$	93
MISC TENDERED \$	94
DEBIT CARD \$	95
CREDIT CARD \$	96
WIC TENDER	97
NO SALE	100
GIFT CERTIFICATE	101
FCODE=251 DESC=" "	

KEY_SIGN_ON	800
KEY_SIGN_OFF	801
KEY_BREAK	802
WAIT	803
CASH_LIFT	804
PAID_OUT	805
X_READ	806
TRAINING	807
RECEIPT	808
ADD_FLOAT	809
POS_REPORT	810
END_OF_DAY	811
TENDER_PURCHASE	812
CHANGE_PASSWORD	813
TAX_REPORT	814
LANG_SELECT	815
SIGN	816
CASH_PURCHASE	817
HELP	818

CHARGE_PAYMENT	819
CHARGE_REVERSE	820
CHARGE_INQUERY	821
DECLARATION	822
LOAD_REFRESH_RCPT	827
PETROLL_MENU	828
SUPERVISOR_MENU	829
PIP_EXIT	830
DEP_REPORT	831
SUSPEND_PRINT	832
RESUME_PRINT	833
REFRESH_RECEIPT	834
EFT_MENU	835
ZERO_SCALE	836
TECH_MENU	837
RECORD	838
PLAYBACK	839
EFT_TENDER	840
VGA_CUST_DISP_MODE	841
EBT_BALANCE_INQUIRY	842
ITEMIZED_CHECK_RPRT	843
REQ_FORCE_AUTH_EFT	844
DISPLAY_DRAWER_ALLOC	845
RELEASE_DRAWER	846
ADD_ITEMS_FOR_SCANP	847
CUST_EJ_UP	848
CUST_EJ_DOWN	849
VOID_TICKET	900
CANCEL_ITEM	901
SUBTRACT	902
DISCOUNT	903

DEPARTMENT	904
RETURN	905
TOTAL	906
WEIGHT	907
NO_SALE	908
TENDER	909
REPEAT	910
TARE_WEIGHT	911
INQUERY	912
SAVE_RECALL	913
CLEAR_PLU	914
CLEAR_LOAD_PLU	915
LOAD_PLU	916
PLU	917
CREDIT	918
SHORT_GROUP	919
TAX_EXEMPT	920
TAX_REVERSE	921
FD_ST_REVERSE	922
RECOVER_TICKET	923
BKGD_LOAD_PLU	924
UPC	925
DISC_REVERSE	926
BAGGER	927
VOID_TRANS	928
COST_PLUS_PERC	929
PRICE_OVERRIDE	930
CUST_INFO	931
CLUBCARD	932
SWIPE_CARD	933
ABORT_BUFFER_PRINT	934

VALUE_PLUS	935
GENERAL_VOID	936
INDEX_TICKET_PRINT	937
REVALIDATION_SLIP	938
HOME_SHOPPING	939
ITEM_NAME_SEARCH	940
LOYALTY_FLY_BUY	941
RECALL_MEMEBR_CARD	942
TECH_START	953
DEPOSIT	954
MARKDOWN	955
MAIN_MENU	956
CARD_VERIFICATION	957
SAVE_ORDER	958
RECALL_ORDER	959
FAMILY_FAVOURITE	960
FREQ_SHOP	961
CUST_TAX_EXEMPT	962
INDYME	963
STORE_COUNTING	964
SECOND_CLUBCARD	965
CHECK	966
CRED_DEB_REENTRY	967
EAT_IN	968
TAKE_AWAY	969
WASTE	970
BANK_CARD_VERIFIC	971
PRE_PAYMENT	972
SUPRESS_BONUS_CPN	973
SAVINGS_PLUS	974
COMPETITIVE COUPON	977

STORE COUPON	978
FAST PAYMENT	980
TENDER CORRECTION	981
VENDOR COUPON	982
ITEM RETURN	983
EVENT GENERAL VOID	984
CASH DEPOSIT	989
CASH WITHDRAWAL	990
CASH CHECK PURCHASE	992
DRIVE OFF	999
TRIPLE COUPON	1000
FORCE RELEASE	1001
BOTTLE DEPOSIT	1003
PUMP TEST	1005
POST MAIL	1011
REMOTE PICKUP	1012
REMOTE LOAN	1013
CAR WASH	1029
CANCEL CAR WASH	1030
GIFT CARD	1032
PRESET PUMP	1033
CANCEL PRESET PUMP	1034
OEM SEC ID OPT IN	1049
JOIN LOYALTY CLUB	1050
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