



- ◆ MODEL: NP-3100K
- ◆ Wall Mount POS System



User's Manual

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1. Features

- * Compact and slim design*
- * Very low power consumption and low heat(Fanless design)*
- * Excellent durability touch screen*
- * RoHS certification*
- * A counterfeit bill discrimination function*
- * Human contact operation OSD*
- * Easy installation*
- * Powerful security function (Dallas lock/Finger print)*

2. Specification

System		
CPU	AMD Geode LX 800(500MHz)	
Chipset	AMD Geode CS5530AC	
Display	TFT 15" LCD/LVDS	
Memory	DDR 512MB on board(Default)	
ROM BIOS	Phoenix/Award	
Storage	SSD(Solid State Disk)/2.5" HDD	
Sound	AC97 2.1 Compatibility	
I/O	2 USB 2.0 Ports 4 Serial Ports	
Ethernet	RTL8139D 10/100 Base-T	
O/S	Window XP Embedded/WEPOS/Linux	
Power Supply	24V/2.5A(60W) SMPS	
Display		
Display	Interface	LVDS
	Panel size	15"(38Cm)
	Resolution	1024*768
	Luminance	250cd
	Contrast Ratio	450:1
	Response time	16ms
Touch	Touch type	5Wire Resistive
	Interface	Internal USB
	Linearity	±3 LSB
	Input Response Time	10.5ms
	Durability	10,000,000 Times
WIFI devices		
WiFi LAN	WIFI ANT. TYPE	SMA Straight Plug Reverse Connector
	Model	iPTIME G054U-A
	Modulation type	IEEE 802.11b, IEEE 802.11g
	Power	USB BUS POWER
	Dimension	82 X 32 X 10mm
	Interface	USB 1.1 / USB 2.0(USB 2.0 Recommended)

3. Look and Dimension.

3.1 Front view



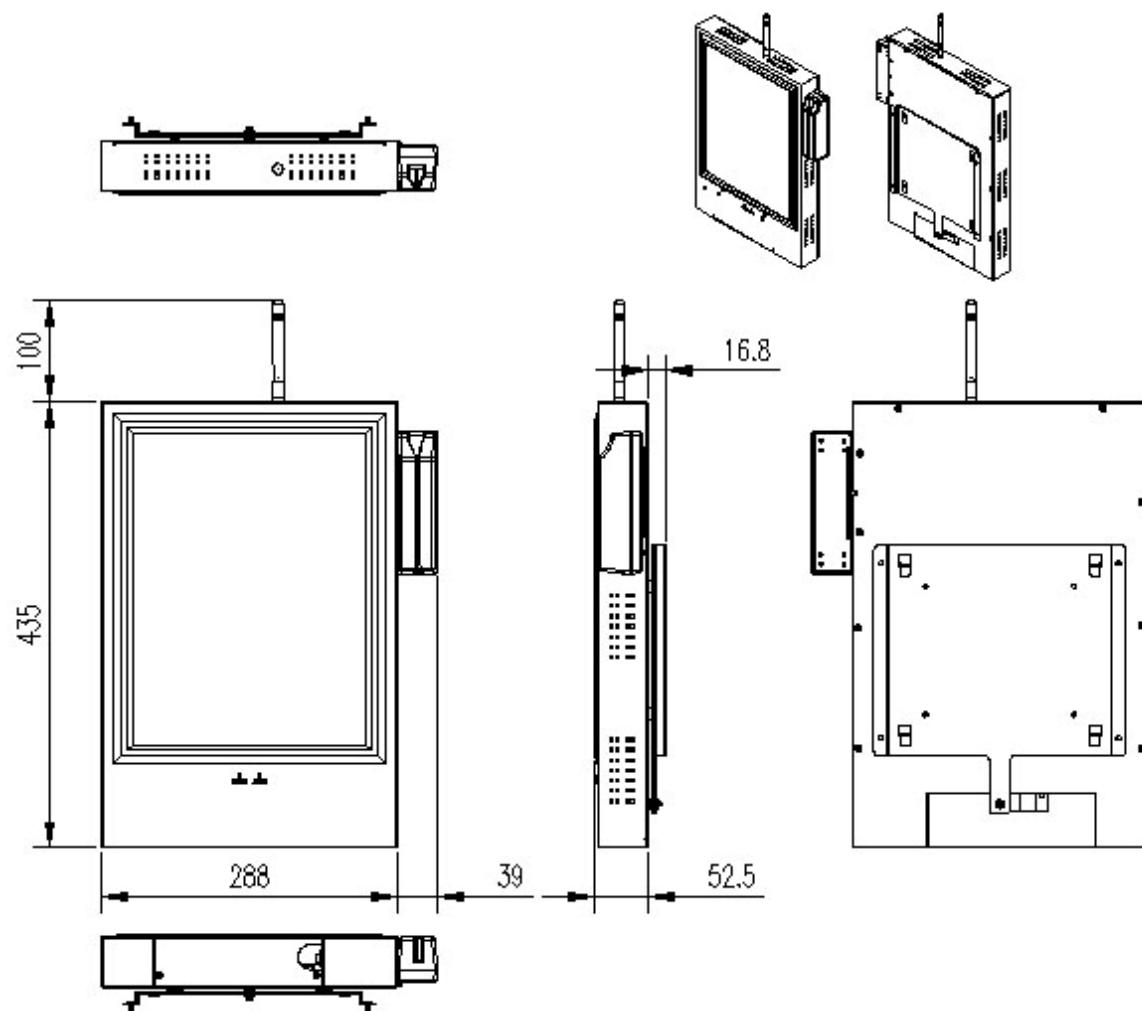
3.2 Side view



3.3 Rear view



3.4 Dimension(mm)



4. Package Contents

1) NP-3100K System



2) Adaptor (SMPS)



3) Power Cord



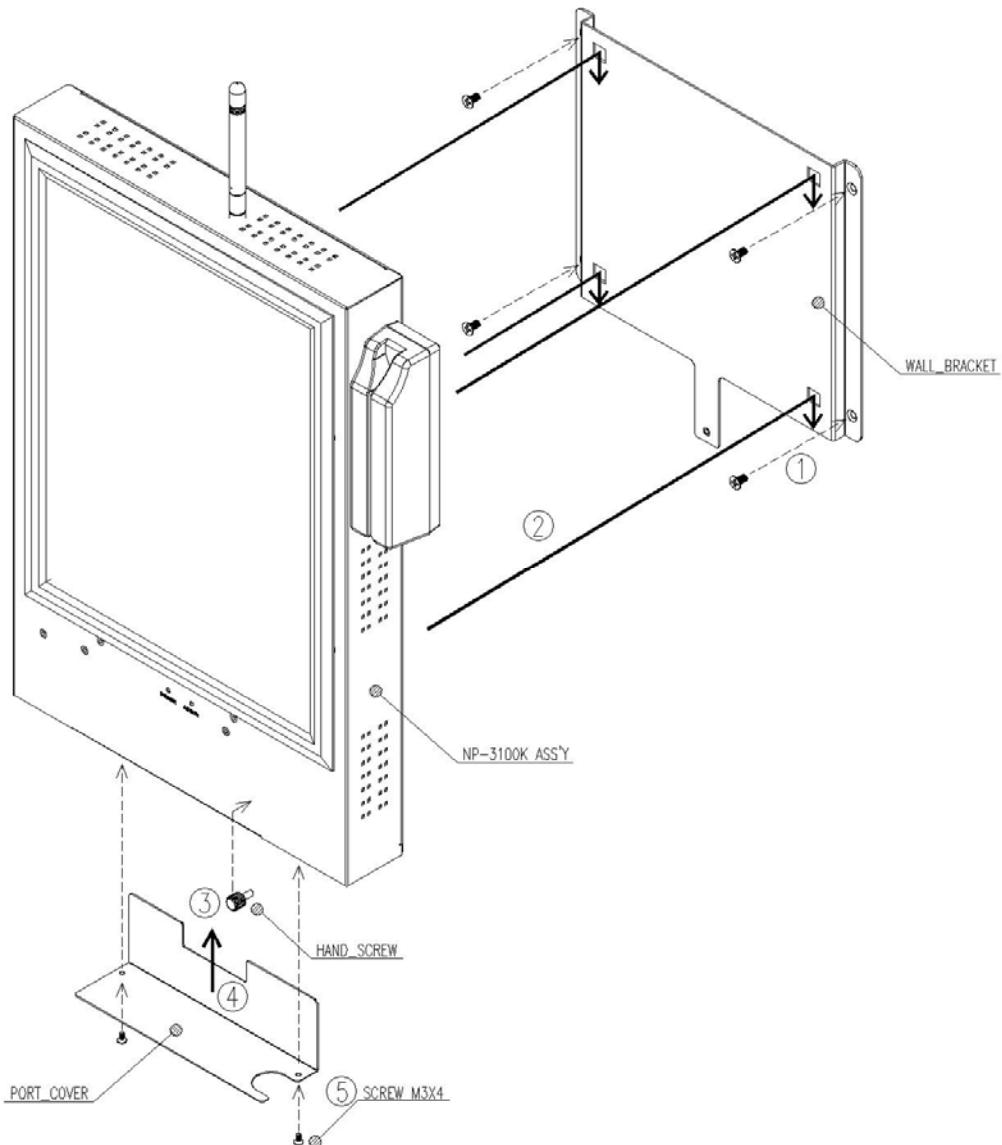
4) Com Port Cable(x2)



7) User Manual

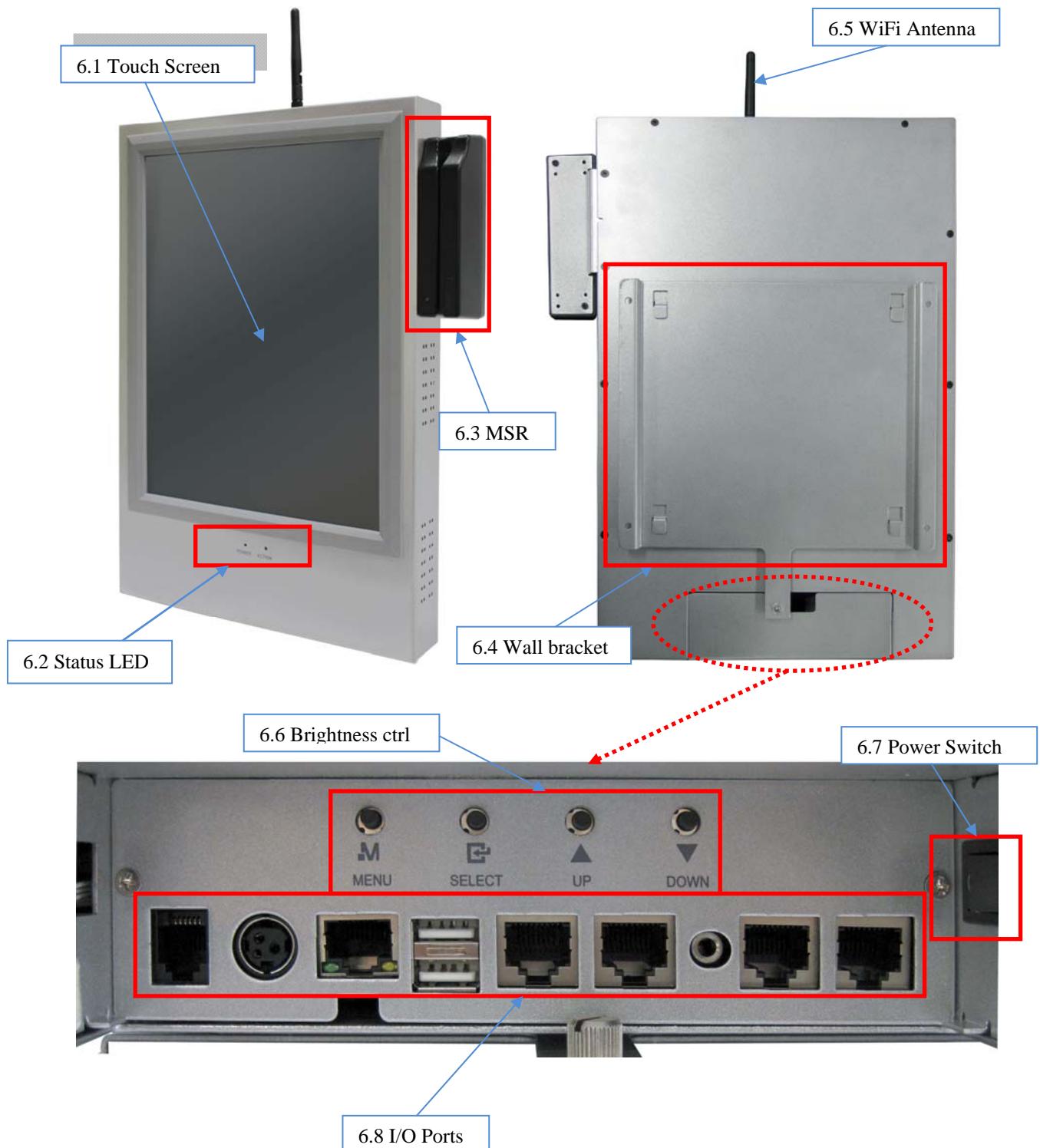


5. Installation



- ① Use 4 screws(4ØX16) to fix wall bracket on the wall
- ② Hanging NP-3100K to the wall bracket
- ③ Use hand screw to hold tight with the bracket
- ④ Connect the peripheral cables like power,LAN etc...
- ⑤ Connect the port cover then fix the screws(M3ØX4)

6. Description for each part(Exterior)



6.1 Picture

6.1 Touch Screen

6.1.1 Touch position calibrate(Widows XP)

You can adjust touch position by yourself using the furnishing program. This program can be downloaded from the following web site(www.nptech.co.kr)

1) If want to regulate touch position, run a program name of ELO touch screen(Bottom of right side menu)

2) The following display appears.



5.1.1 Picture

3) Click 'Align' menu to align touch position

4) You can see displays are below (Align processes are total of 4 steps). Push down center of crosshair



5.1.2 Picture



5.1.3 Picture



5.1.4 Picture



5.1.5 Picture

* **Note:** If your touch position is not work properly. Please try again step 3)~4)

6.2 Status LED

NP-3100K has two LEDs. LED is shown to system's status.

Blue (left side) LED is show you power status.

Red (right side) LED is show you action of brightness control button.

6.3 MSR(Magnetic Swipe reader)

MSR can support I/II tracks. But default tracks are I/II track. Third track is option.

6.4 Wall bracket

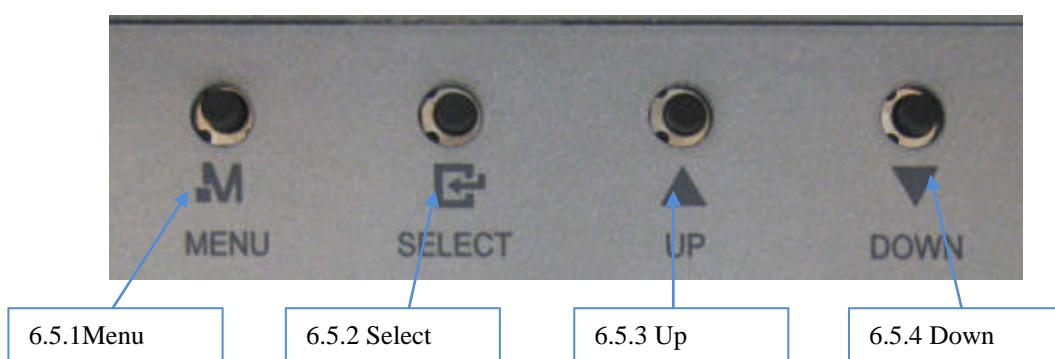
Wall bracket use to fix on the wall

6.5 WiFi Antenna

Wireless internet Antenna

6.6 Brightness ctrl

These keys are control the brightness of LCD.



6.6.1 Menu

To enter adjust LCD brightness (Contact hold 2 seconds after release)

6.6.2 Select

Exit from adjust LCD brightness menu

6.6.3 Up

If you want to increase LED brightness at LCD adjust menu. Use this button

6.6.4 Down

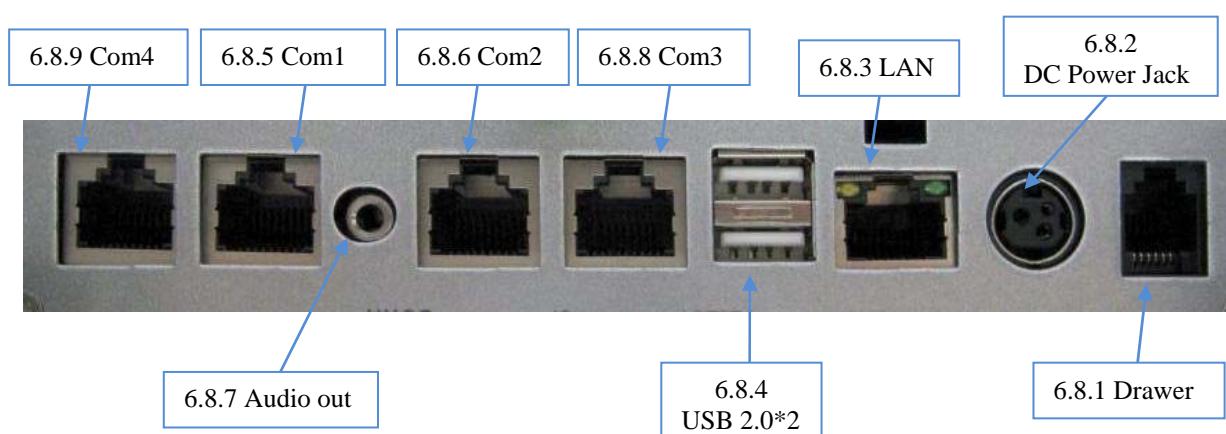
If you want to decrease LED brightness at LCD adjust menu. Use this button

6.7 Power Switch

This switch use for turn on/off system

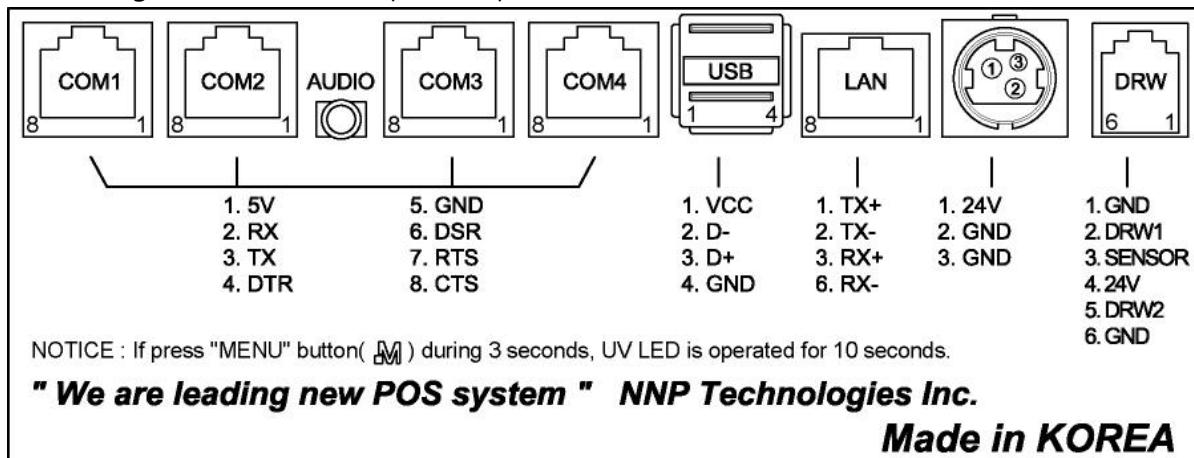
6.8 I/O Ports

NP-3100K can support various I/O ports.



6.8.1 I/O Map

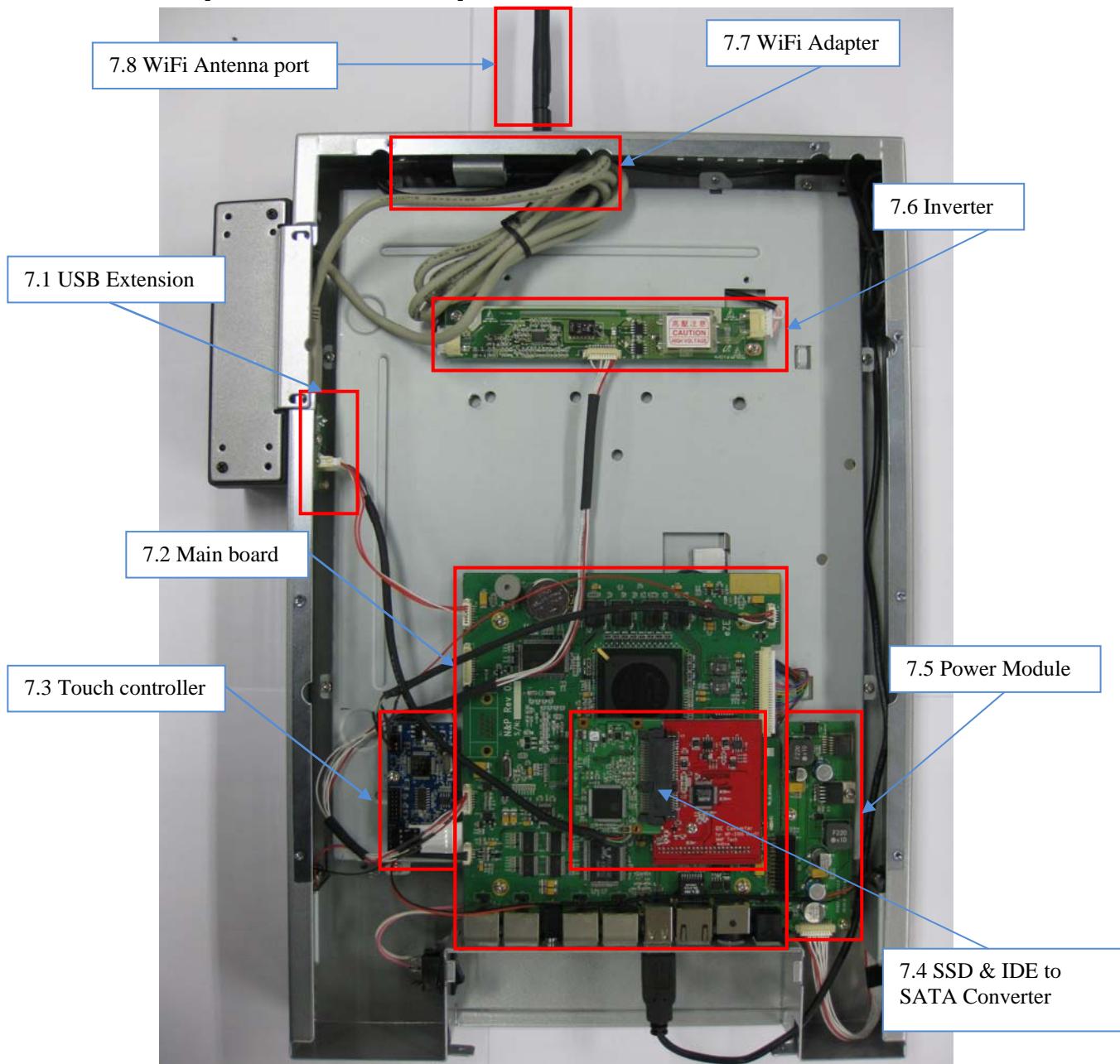
Below image is shown each map of I/O port



6.8.1.1 Picture1

Note: COM1~4 Port can supply 5voltages by pin no.1.(Default setting is COM1/2:0V, COM3/4:5V)

7. Description for each part(Interior)



7.1 USB Extension

This board is extending a port of USB. Generally it using for connect with MSR

7.2 Main board

NP-3100K Main board.

7.3 Touch controller

This device control the touch interface. Communication interface is USB.

7.4 SSD & IDE to SATA Converter

SSD(Solid State Drive) is replacement for HDD. It has 16GB capacities.

IDE converter is converted IDE data to SATA. It uses for SATA interface devices.

7.5 Power Module

Power module converts DC to DC and supplying voltages to main board. Power module receives 24V DC input voltage. It is converted to 12V and 5V DC.

7.6 Inverter

Supplying voltages to LCD BLU

7.7 WiFi Adapter

Wireless LAN allows you to use.

7.8 WiFi Antenna Port

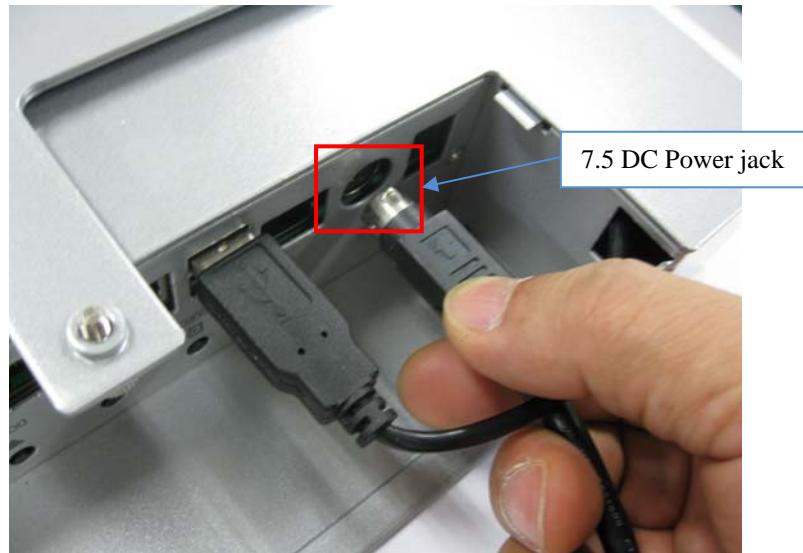
Wireless LAN antennas connect here.

IMPORTANT NOTE : This equipment must not be operated in conjunction with any other antenna

8. Operating the system

8.1 Plugging the power cord with the adapter

8.2 Connect the DC plug to DC power jack



8.3 Turn On/Off the system

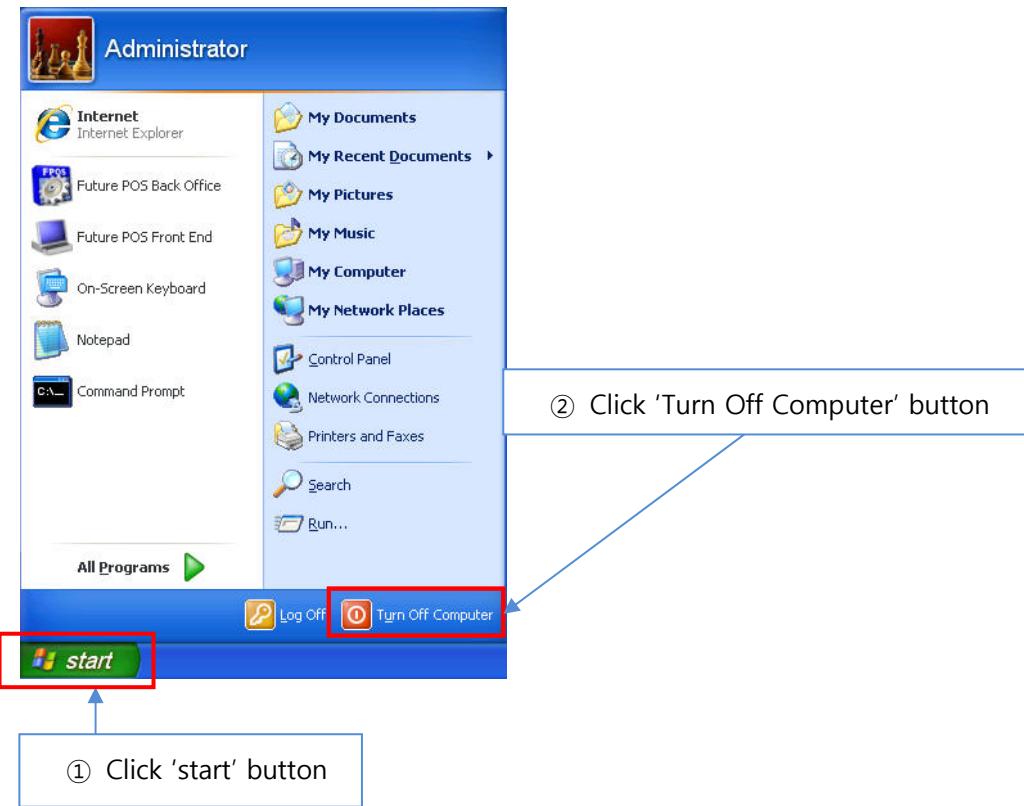
8.3.1 Turn On

Press the power S/W as you see below the picture. The bottom of the right side

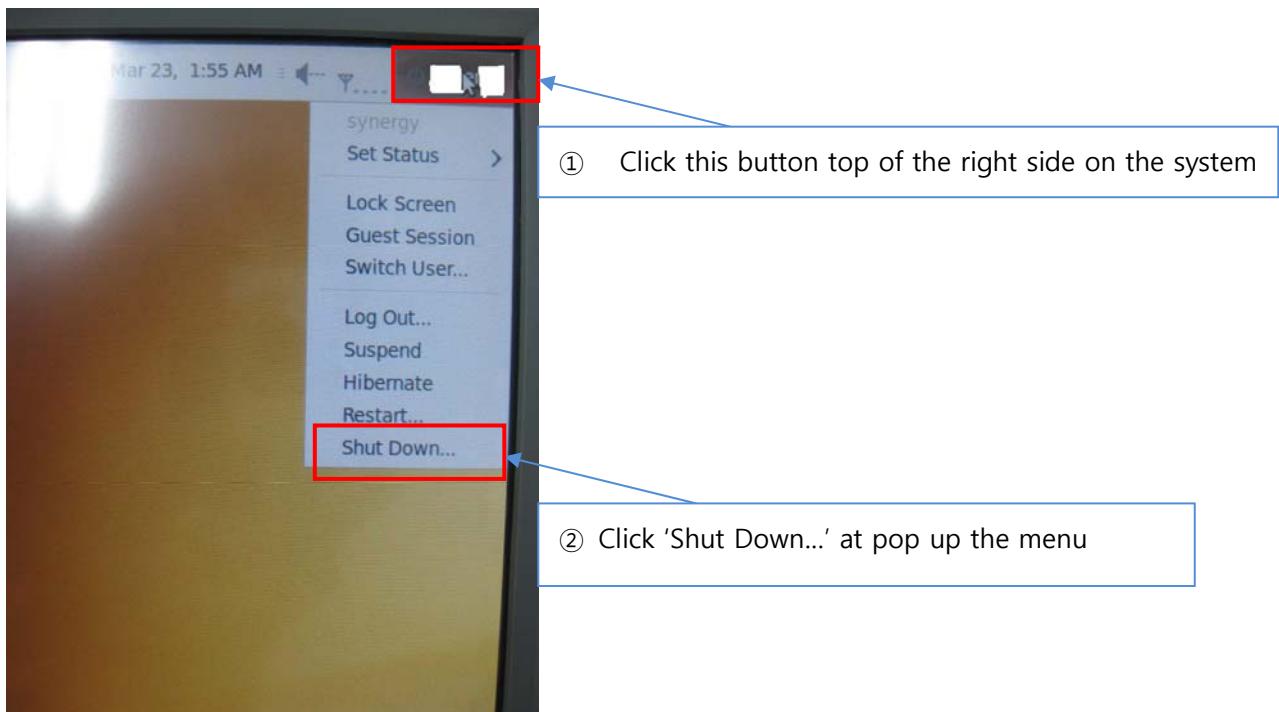


8.3.2 Turn Off

8.3.2.1 Widows XP



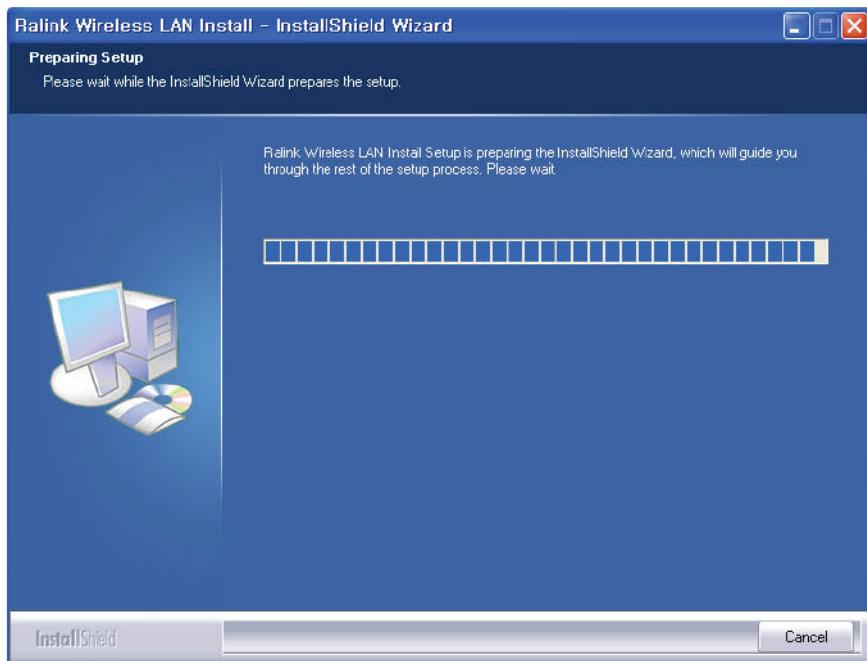
8.3.2.2 Ubuntu 9.10



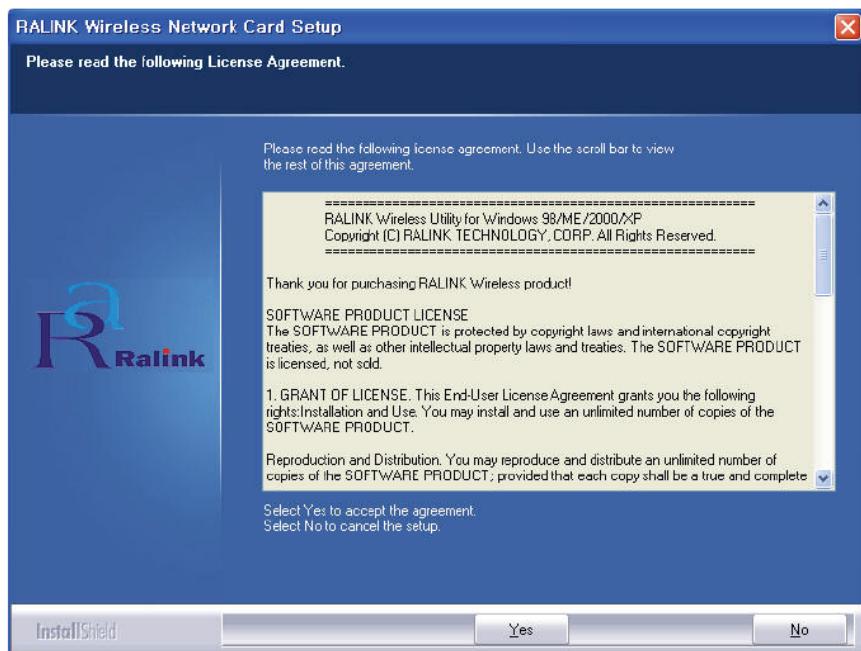
INSTALLATION WIFI SYSTEM

Now run the following step

Step 1. Waiting for Setup



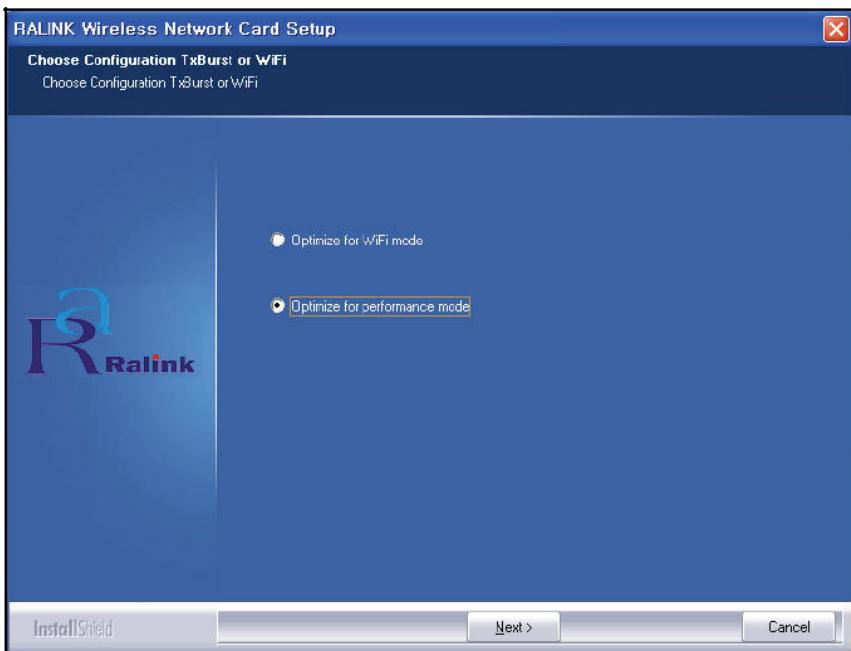
Step 2. Click to "Yes"



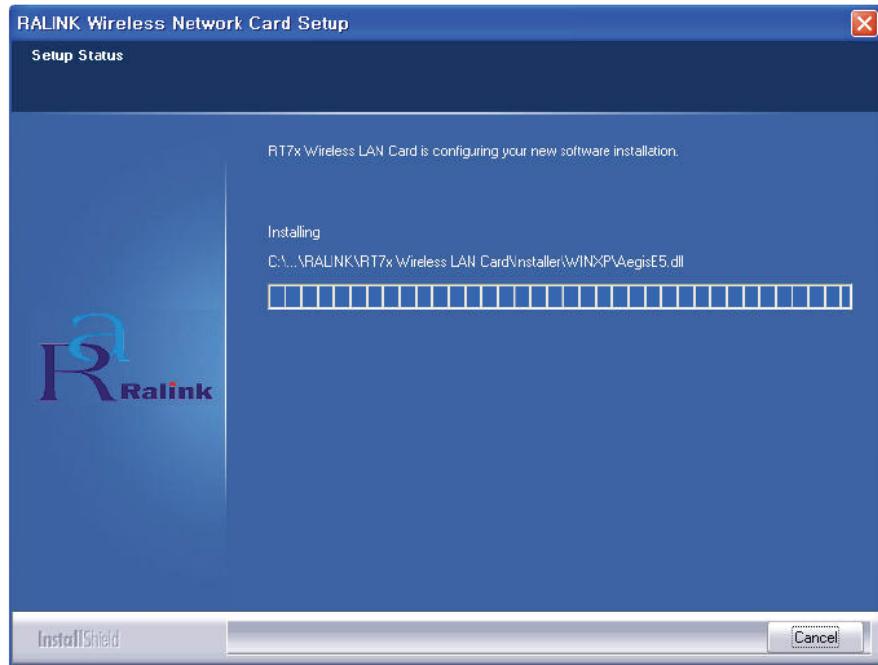
Step 3. WZC (Microsoft Zero Configuration Tool) from the Windows XP OS to support more features Windows 9X, 2000 department of the OS must be the "Ralink Configuration Tool"
Please select. And Click "Next"



Step 4. 'performance mode' selection Tx BURST Ralink's chipset is enabled to use the same model compatible with the wireless connection speed will improve.



Step 5. Waiting for Setup.



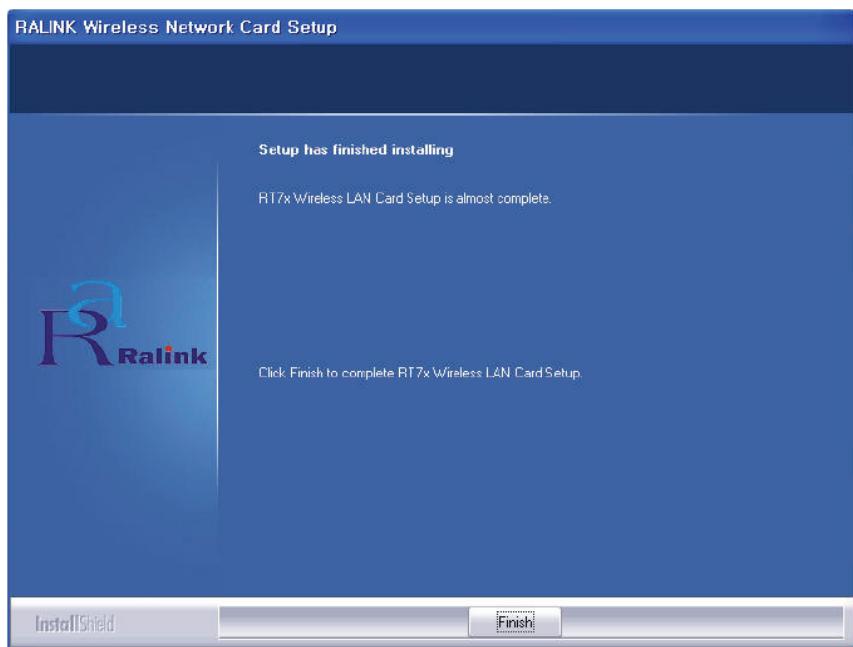
Step 6. The following message displayed at the bottom of the product, please connect to the USB port.



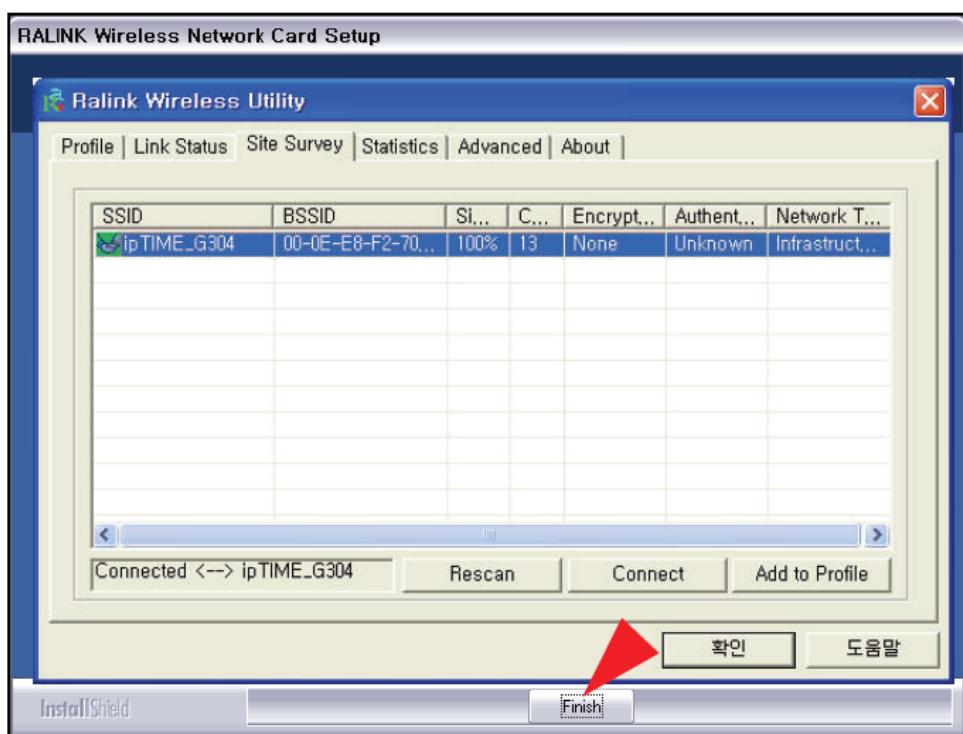
Step 7. Waiting for Setup



Step 8. Click the Finish button to complete the driver installation.



Step 9. Ralink Wireless Utility will automatically run.



Using Wireless

Step 1. The driver is installed properly and look right in the taskbar tray window of a wireless network, wireless LAN utility Windows tray icon is created in order register.



<Check your wireless network properties window tray>

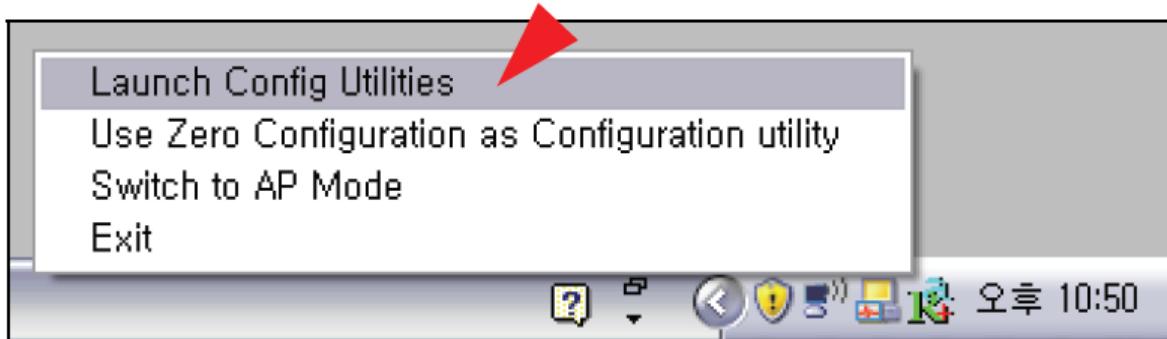


<Wireless Utilities Windows tray, a registration confirmation>

Step 2. Using the wireless utility, a wireless router (or AP) is a way to connect to. Wireless LAN Utility icon in the taskbar, right-click and double. Or by right-clicking on the Wireless Utility icon, click the Launch Config Utilities.

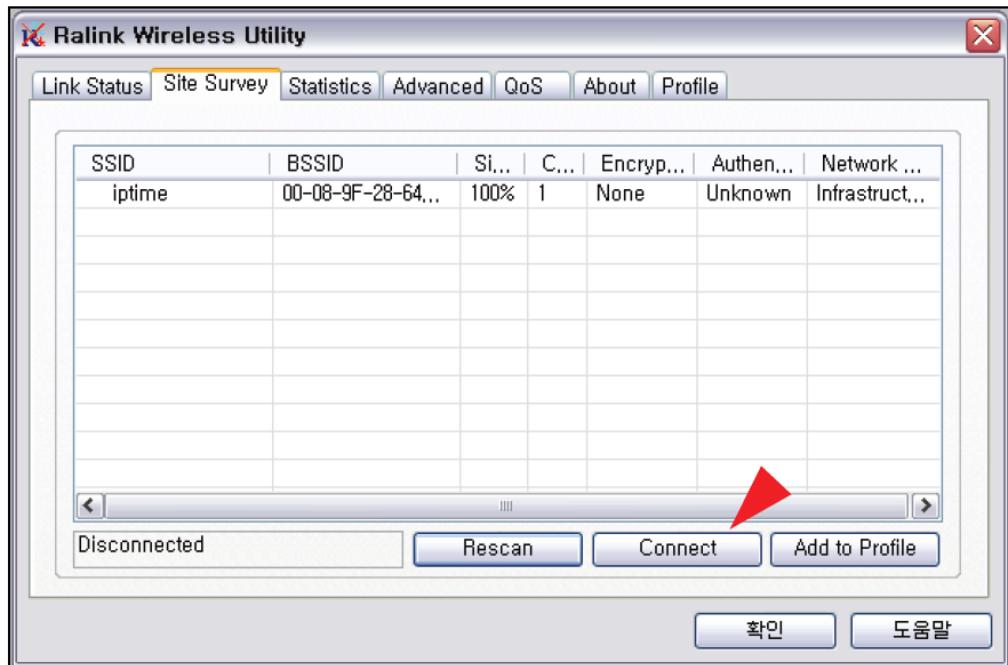


< Wireless LAN Utility icon>

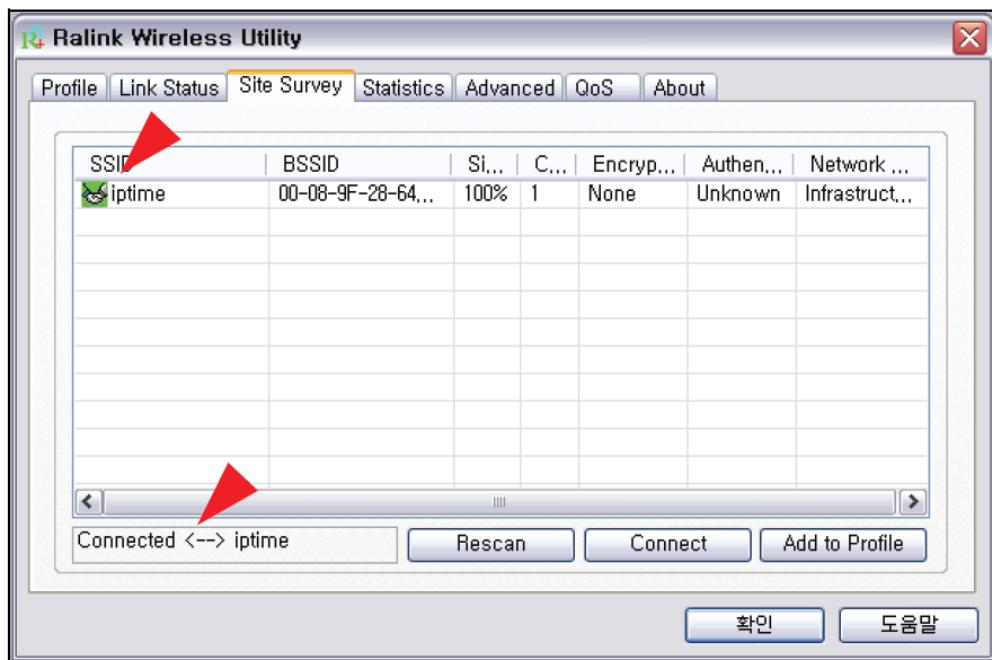


< Running Lanuch Config Utilities>

Step 3. Site Survey items you want to connect to a wireless signal from a double click. Or to connect a network name (SSID), select the connect button and then click



Step 4. As shown below, select your network name (SSID) that can be found in the attached.



Using POS System

Program Setting Flow.

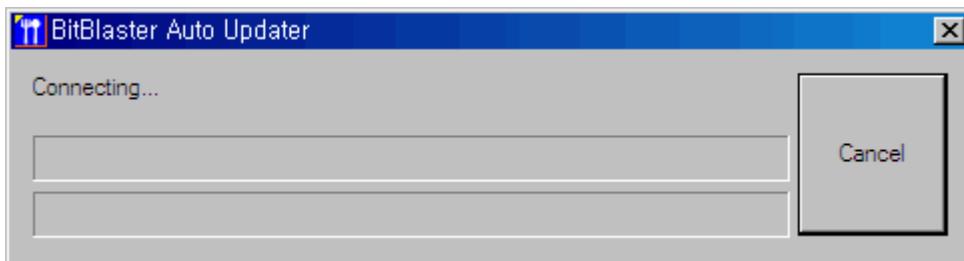
Under this sequence guide you can easily set up our program.

1. Register Your License number.

2. Enter all store information on **Setting-> Store Management**
3. Allocate “function buttons” of Table/Check screen on **Setting->Table Functions**
4. Allocate “function buttons” of SALES MODE screen on **Setting-> Menu Functions**
5. Configure each Table/Check level on **Setting-> Table Plan**
6. Allocate each MENU button with proper size/font/image/color on **Setting -> Menu Plan**
7. Allocate MODE buttons which are used to manage your store on **Setting ->Home Functions**
8. Configure devices and various options on **Setting -> Configuration**

1. Run SmartCE.exe - or - Main.exe.

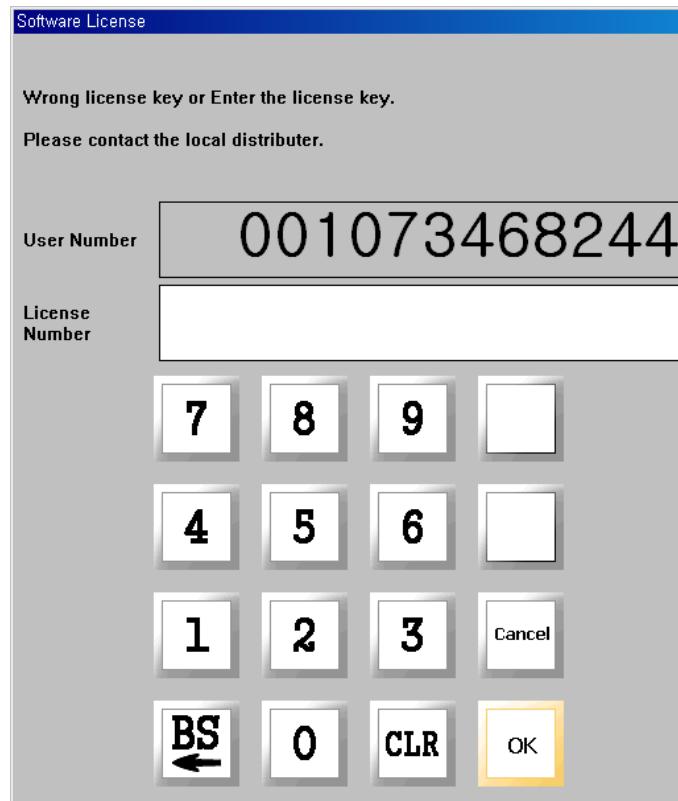
- If you run SmartCE, you can see the progress BAR updating the Main.exe



- You can refer to the “updateinfo” file in the “INI folder” that contains the update server IP address etc...
- After updating any files, the SmartCE.exe automatically runs the SMARTCE program.
- If you don't need to update the program, then just “double click **Main.exe** to run the software”.

A. 2. Enter the License Code.

- When the software runs for the first time, it shows the **Software License** window.



- Check the license number on the back of the POS terminal and enter the license number.
- If you can't find 8 digit license number, then contact your distributor or call... + 82-2-2026-7200

3. Go to Store Management ... by selecting... **Setting -> Store Management**.

- You need to input all data information needed to run our software in the following sequence.

Create your **Store's** information; create a **POS** name for each **POS** used in the Store, create **Staff/Clerk Pay** levels, **Authority Levels**, individual **Staff/Clerks**, **Table/Checks & Group/Levels**, **Table/Checks** of each Table level, **Departments** that the PLU/Menus can link to, **Groups** that PLU/Menus can link to, **KP Groups** that PLU/Menus can link to, **PLU/Menu creation**, **Screen/Menu Page lists** for easily selecting PLU/Menus when ordering, linking normal PLUs to **Set Menu** PLUs, apply **Currencies** used in your store, sending **Comment lists** to the Kitchen Printer, **DC lists** for discount prices, preset **Cash Buttons** for easily getting cash input, **Sales Type** button lists for use on finalizing, **Tax** lists used at your store, **Option** lists and **Option Details** that can be selected in the PLU/Menu ordering time, **Choice** lists and **Choice Details** that can be selected in the PLU/Menu ordering time.

A. Enter the Store's information.

- Click the "Create" button to enter the store's information, and then enter the store information into the screen.

KP Group	Tax	Option	Choice	Screen	PLU	Option Detail	Choice Detail	Set Menu
Currency	Float	Comment	DC	Cash Button	Sales Type	Customer Group		
Store	POS	Staff Pay	Authority Levels	Staff	Table Group	Check	Department	Group

Store Information

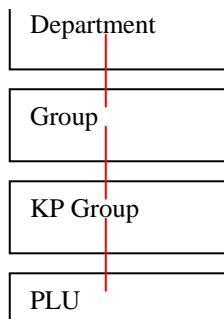
NNP POS

Store Edit

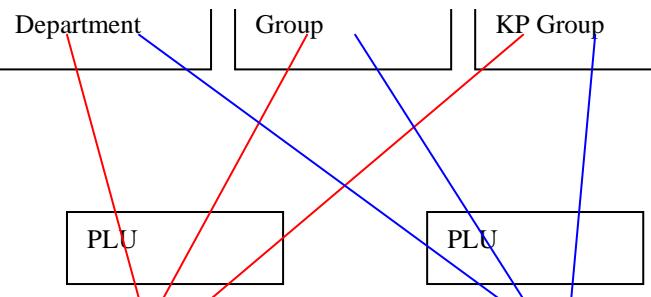
Form fields:

- Store Type: Stand Alone
- Store Name: N&P Technologies
- Business Number: 2018176548
- Business Number2:
- Conditions: Manufacture
- Category: POS
- Currency: USA
- ZIP:
- homepage:
- Address: 707 Samsung Leaders Tower , 60 - 15 Gasan-Dong Seoul , Korea
- Email:
- Tel: +82-2-2026-720
- Fax:
- Boss Name: Stephen
- Boss Tel:
- Boss CP:
- Open Date: 2008-10-24
- DB save day: 60
- Class Structured

In this example **Check the "Class Structured"**



In this example **Uncheck the "Class Structured"**



B. Enter the machine names that you plan to use.

NNP POS

POS Add

* Pos Name	Settle POS	...	* Store Code	N&P Technologies
<input checked="" type="checkbox"/> Pos Use	<input type="checkbox"/> Order Staff	<input type="checkbox"/> Customer Count		
<input type="checkbox"/> CMS	<input type="checkbox"/> Attendance			
<input type="checkbox"/> Seat Use	<input type="checkbox"/> Customer			

* The Information is required.

OK Cancel

- In this step, you only have to enter the POS name, and check the Pos Use box.
- You need to allocate names to all POS tills when you have more than one POS till.

NNP POS

Base Code Input

Currency	Float	Comment	DC	Cash Button	Sales Type	Customer Group
KP Group	Tax	Option	Choice	Screen	PLU	Option Detail
Store	POS	Staff Pay	Authority Levels	Staff	Table Group	Check
					Department	Group

POS Information

Store Code	Pos Number	Pos Name	Pos Use	CMS	Van Code	Seat Use	Order Staff
N&P Technolo...	2	Order POS	Y	N	1	N	N
N&P Technolo...	3	Settle POS	Y	N	1	N	N

Help Close

C. Create Staff (Clerk) Pay levels.

- You can make units of calculation for staff payments here.



Currency	Float	Comment	DC	Cash Button	Sales Type	Customer Group
KP Group	Tax	Option	Choice	Screen	PLU	Option Detail
Store	POS	Staff Pay	Authority Levels	Staff	Table Group	Check
					Department	Group

Staff Pay

Store Code	Pay Code	Pay Name	Update Date	Update User
N&P Technolo...	1	Hours	2008-10-24 17:...	Stephen
N&P Technolo...	2	Monthly	2008-10-24 17:...	Stephen
N&P Technolo...	3	Weekly	2008-10-24 17:...	Stephen

NNP POS

Staff Pay Add

* Store Code	N&P Technologies
* Pay Name	[...]

* The Information is required.

OK Cancel

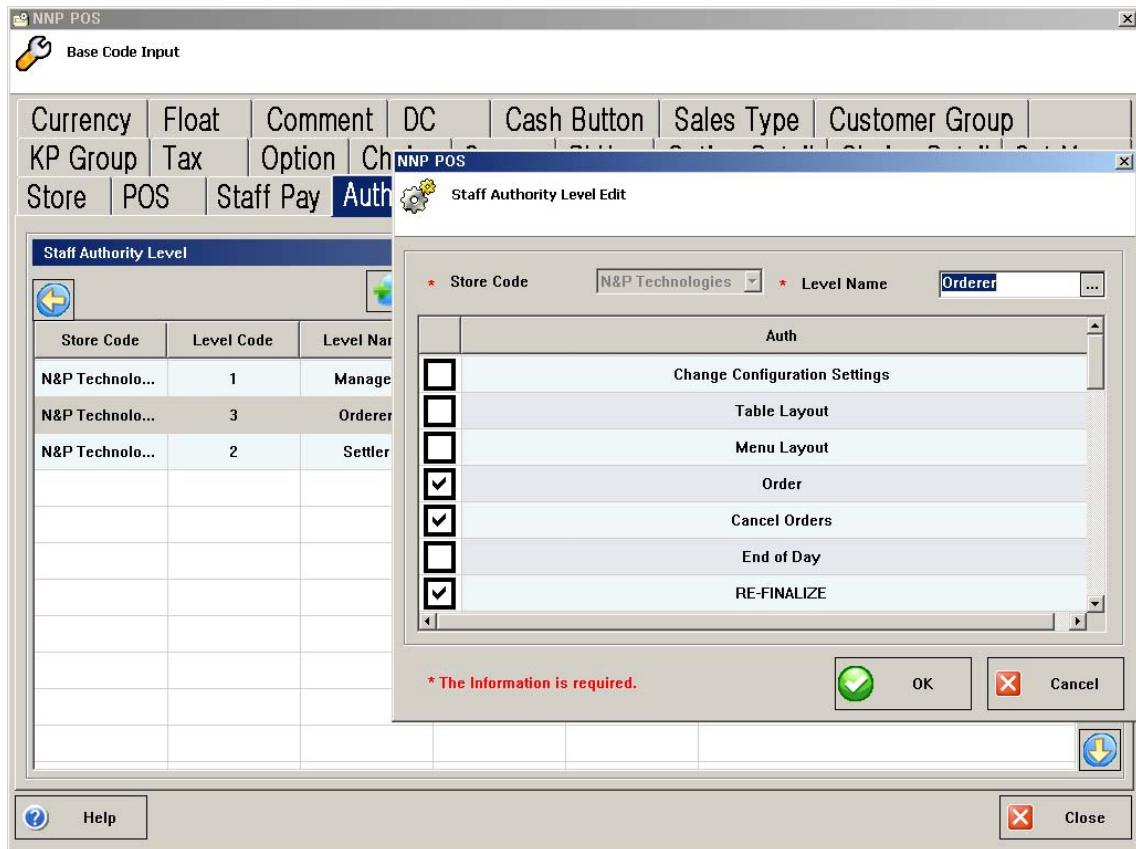
Help Close

B. D. Create Authority Levels.

- You can make many authority groups like you see below.
- Each authority group needs to be checked under more than one of the detail authorization check boxes.

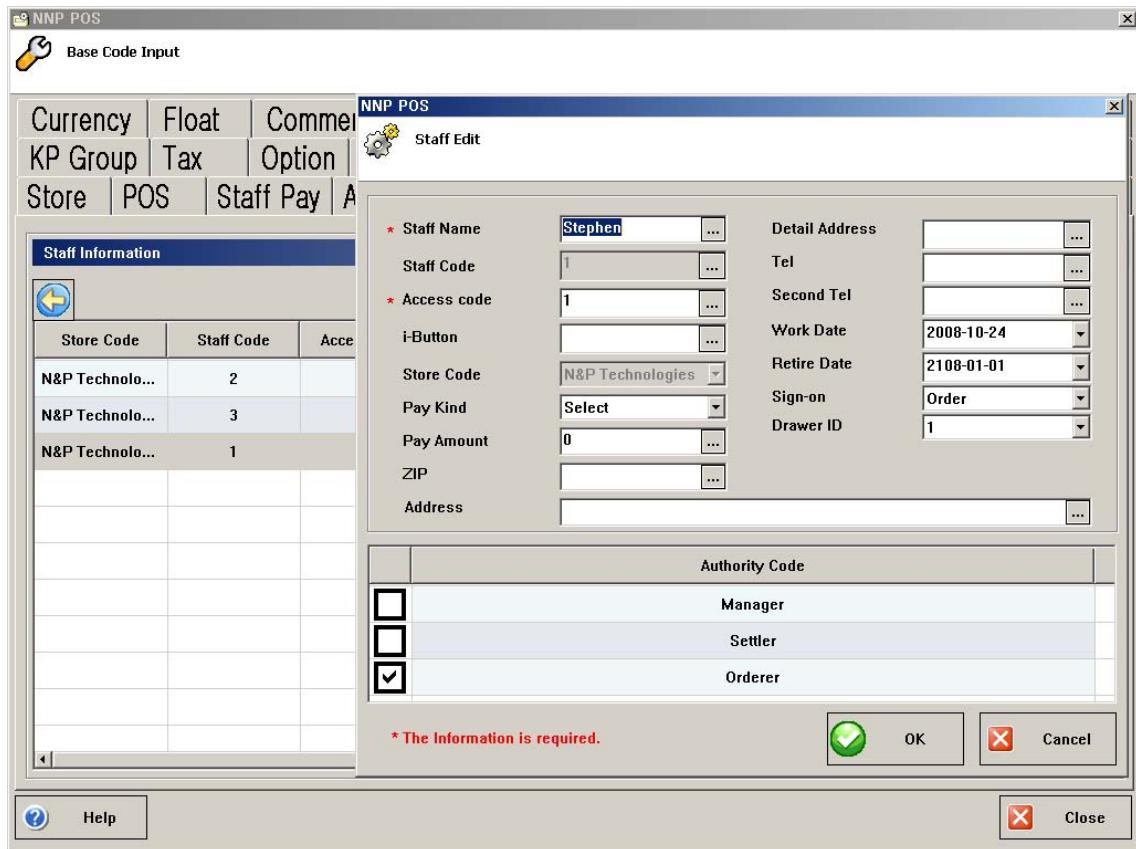
Ex) Below, the sample “**Orderer group**” is permitted to ... order / cancel / re-finalize.

- Every Staff / Clerk must belong to one of the Authority Levels.
- We strongly recommend that “**Manager Groups**” be checked under all detail authorizations.



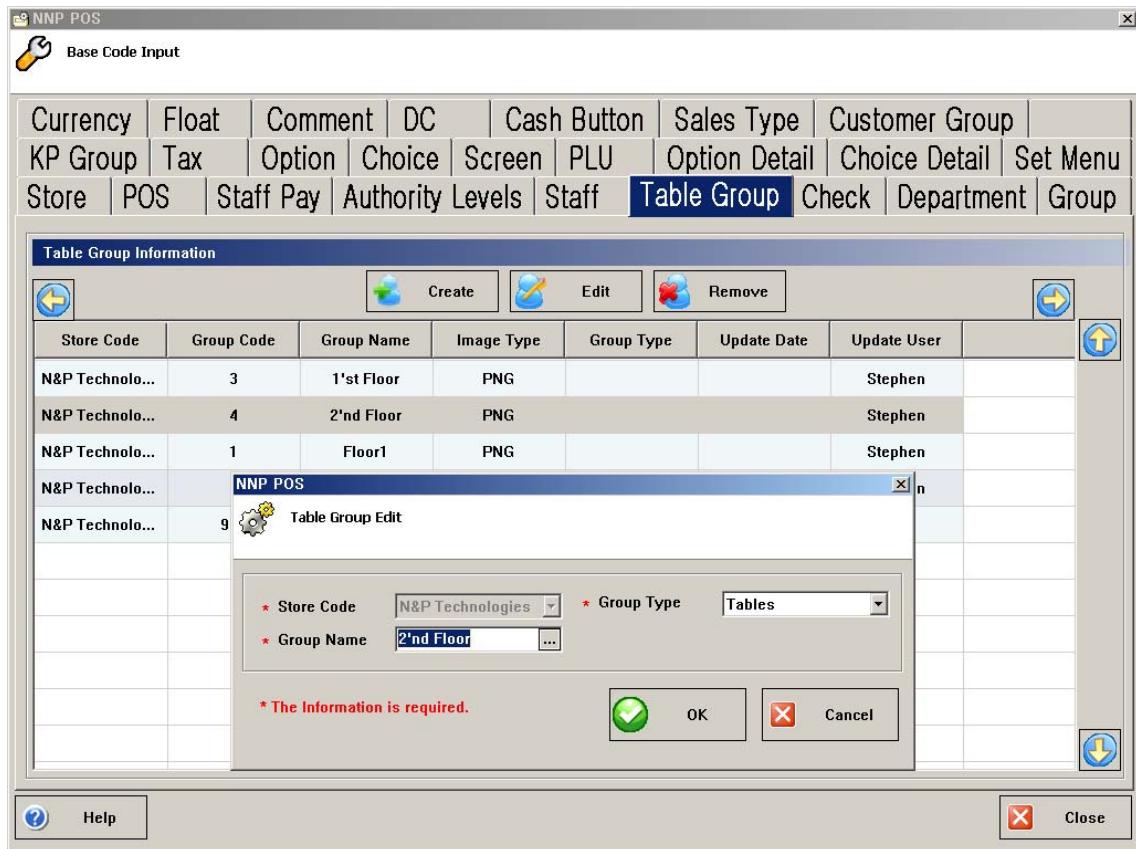
C. E. Individual Staff (Clerk)

- You need to create files for all staff members that use the POS tills.
- Each staff member must have a different unique access code.
- Access codes can have from 1 to 4 digits.
- Each staff member can have a unique i-Button for convenience.
- Every staff member needs to belong to one of the Authority levels. You can do this by checking the authority code check box like you see below.



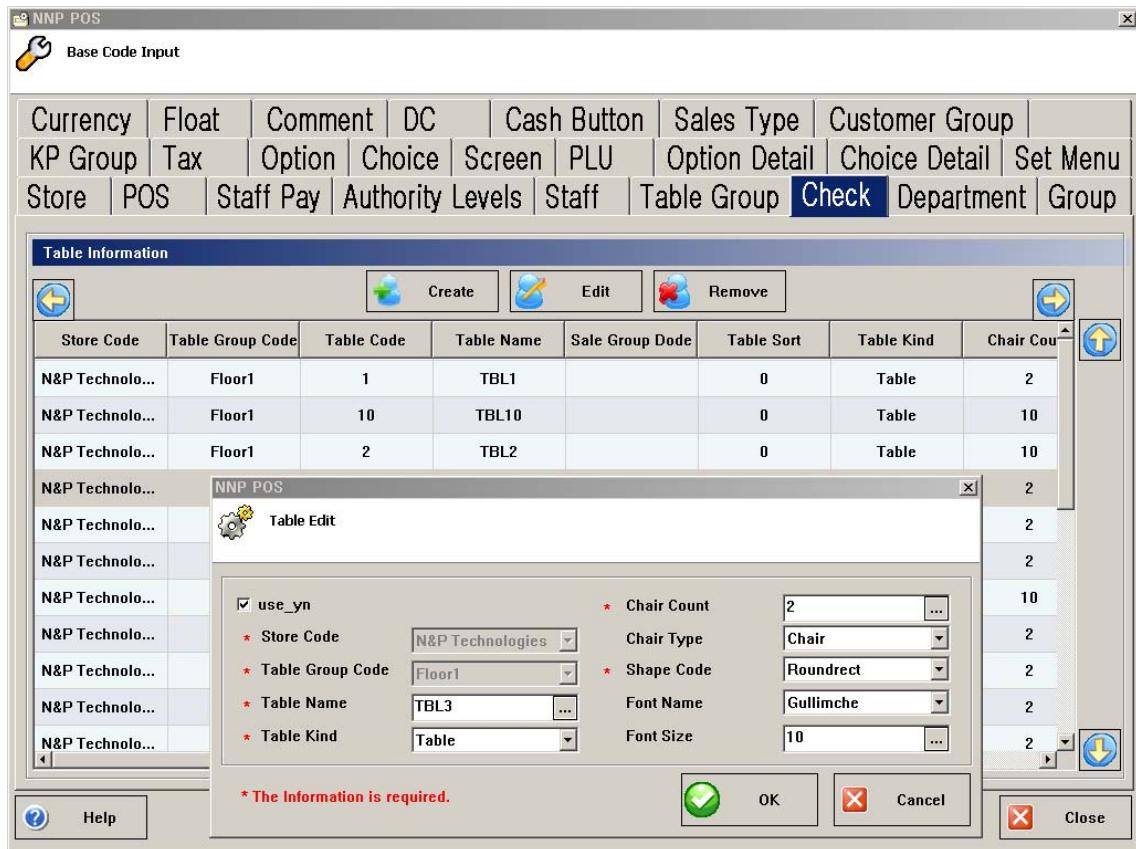
D. F. Table (Check) Group (level)

- Making a Table (Check) Group (level) is easy for classifying Tables (Checks).
- If the store has Tables (Checks) ... at least One Table Group must be created.
- The sample screen below has two Table Groups, One is for the first floor, and the other is for the second floor.



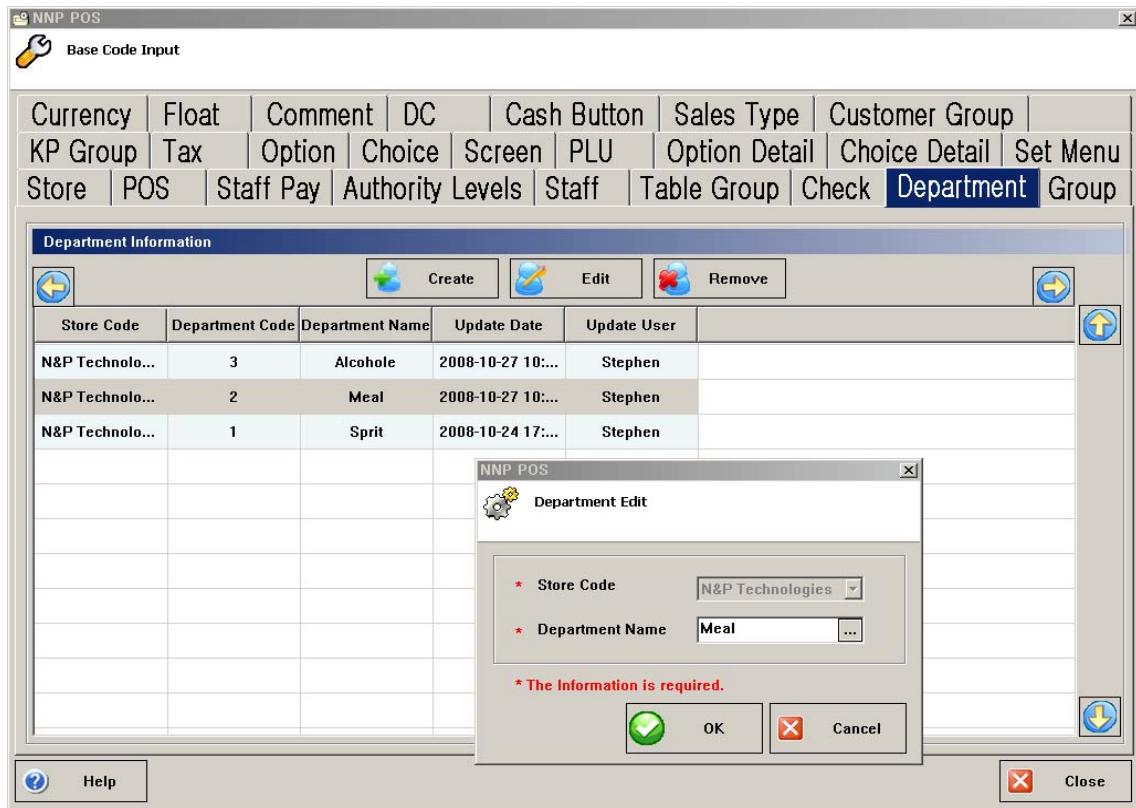
E. G. *Tables* (Checks) of each Table Group.

- You can make as many Tables (Checks) as the store needs.
- You can also easily change your table layout in the ... **Setting -> Table Plan** process.



F. H. Departments that the PLU (MENU) can link to.

- You can make Department Categories.
- If PLUs are linked to a department, all sales results of PLUs, are accumulated in that department.



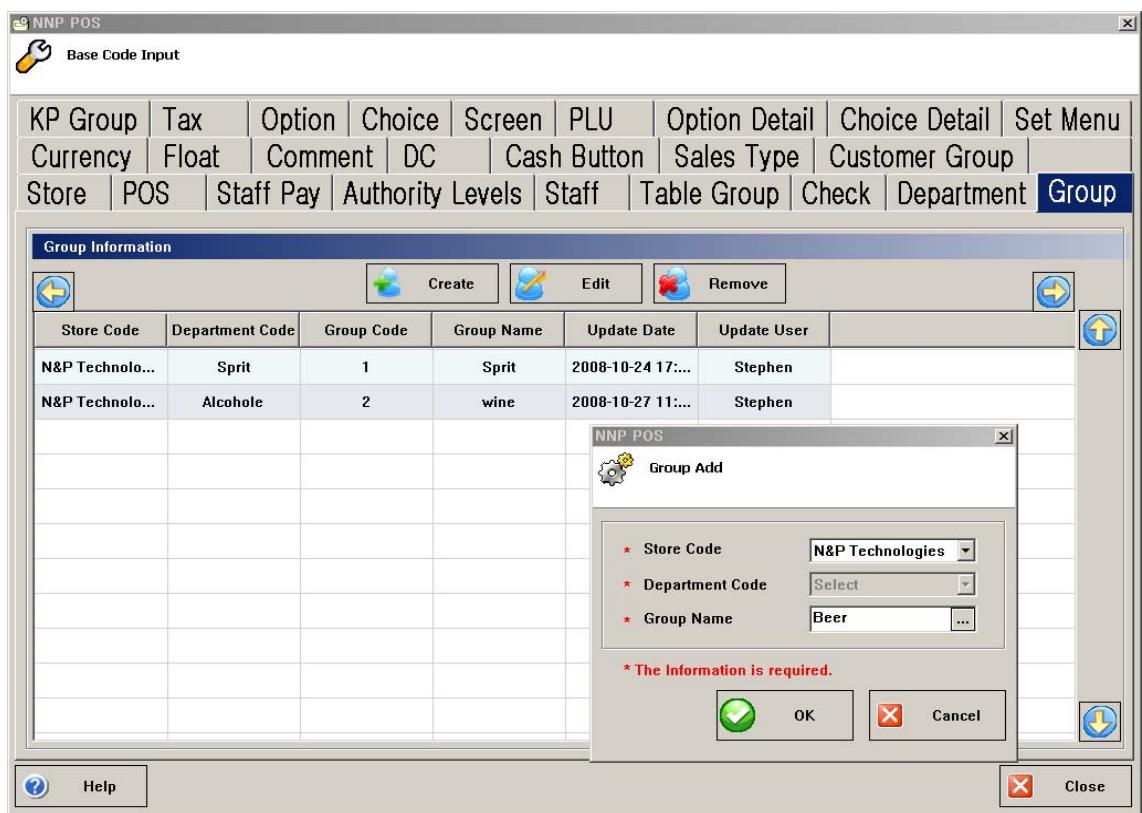
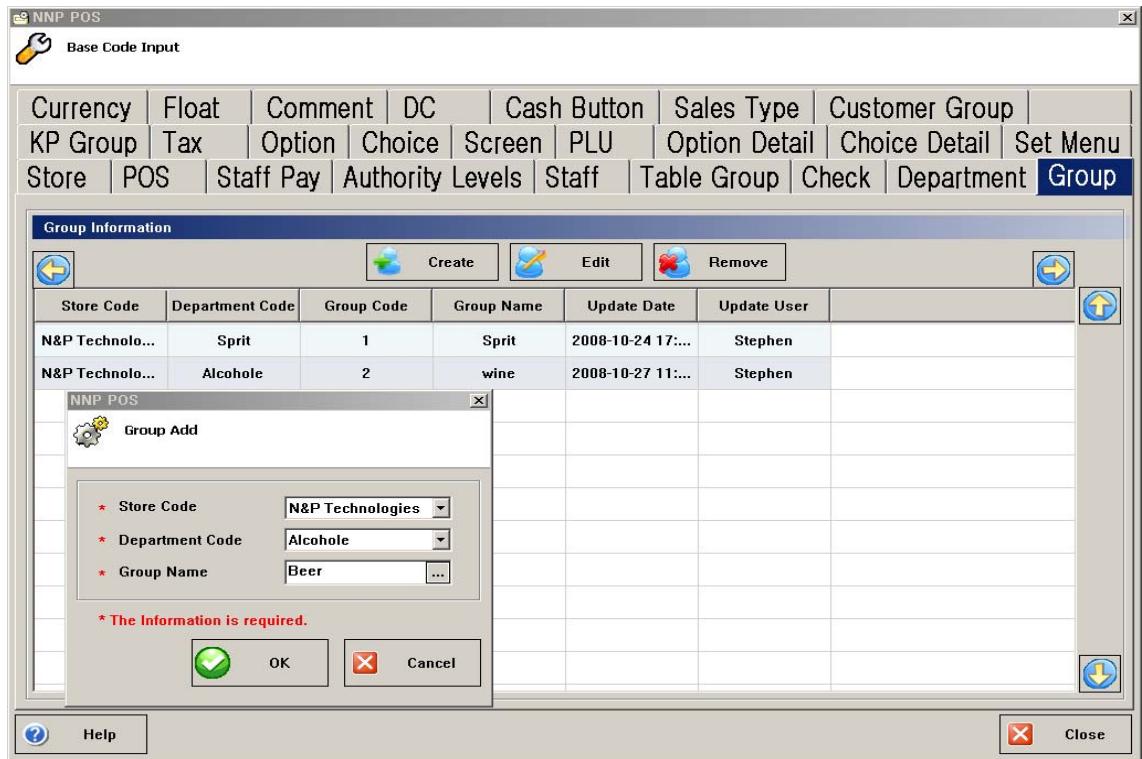
G.

H. I. Groups that the PLU (MENU) can link to.

- You can make Group Categories.
- If PLUs are linked to a Group, all sales results of PLUs are accumulated in that Group.
- You can select whether a Group is linked to a Department or not by checking - or not ... the [Class Structured of Store Tab.](#)

* Store Type	Stand Alone	Email
* Store Name	N&P Technologies	* Tel
* Business Number	2018176548	Fax
Business Number2		* Boss Name
* Conditions	Manufacture	Boss Tel
* Category	POS	Boss CP
* Currency	USA	Open Date
ZIP		* DB save day
homepage		
* Address	707 Samsung Leaders Tower , 60 - 15 Gasan-Dong Seoul , Korea	
Detail Address	<input type="checkbox"/> Class Structured	

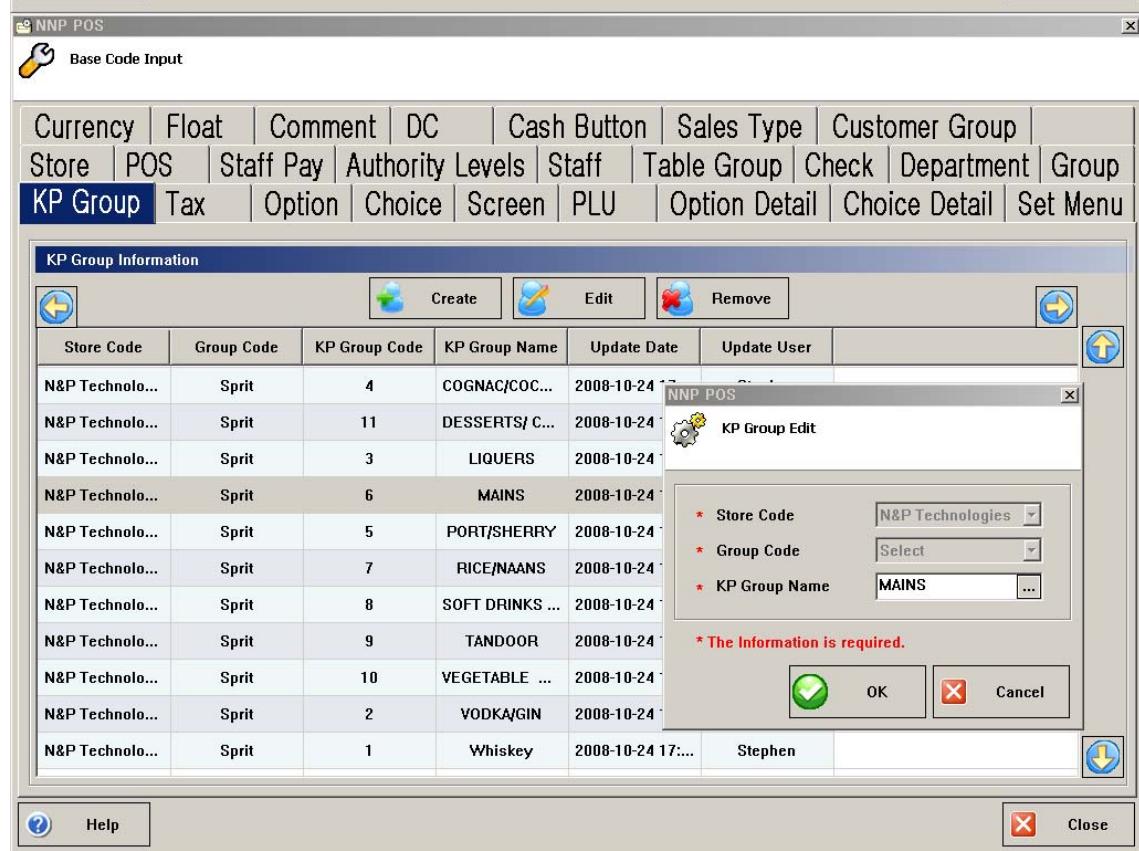
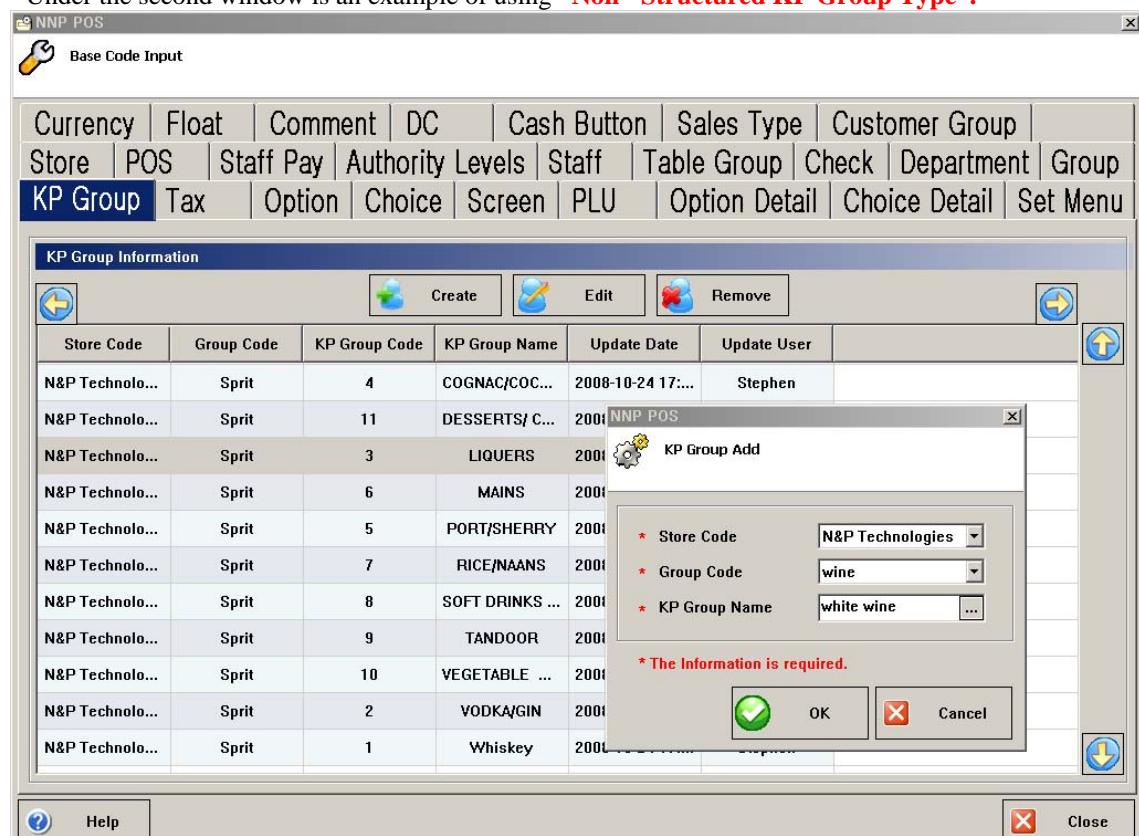
- Under the first window, is an example of using a “**Structured group type**”.
- Under the second window, is an example of using “**Non - Structured group type**”.



I. J. KP Groups that the PLU (MENU) can link to.

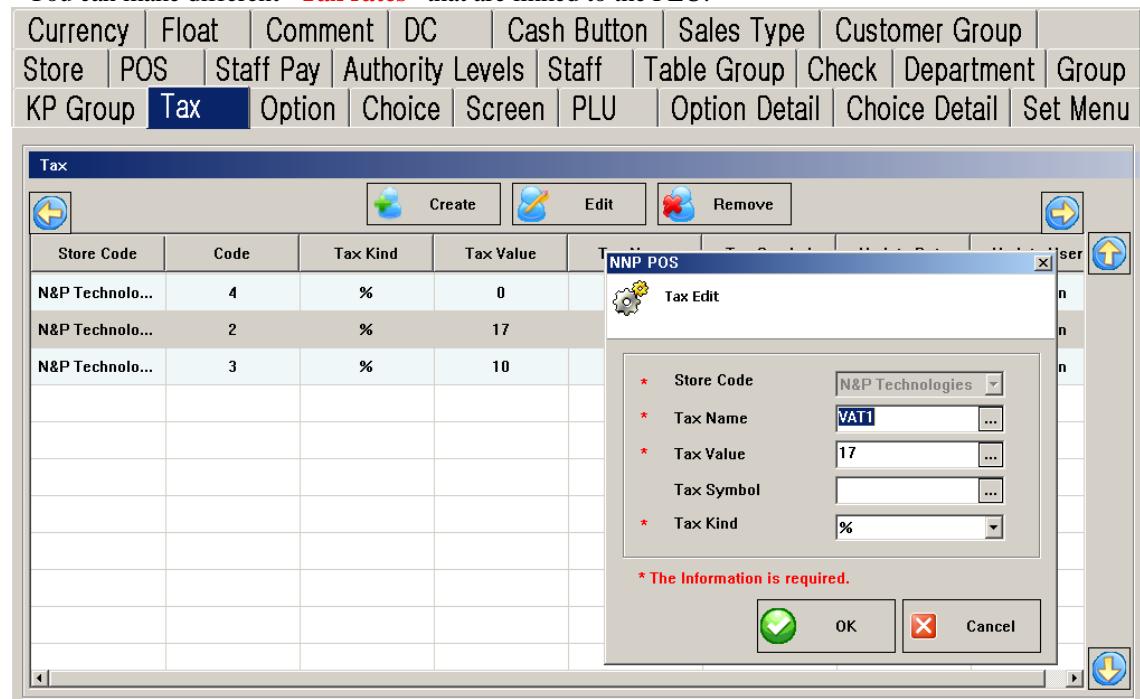
- You can make (Kitchen Printer) KP Group Categories.
- If the PLUs are linked to a KP Group, all sales results of PLUs, are accumulated in that KP Group.
- You can select whether a KP Group is linked to a Group or not by checking - or not ... the **Class Structured of Store Tab**.

- Under the first window is an example of using a “**Structured KP Group Type**”.
- Under the second window is an example of using “**Non - Structured KP Group Type**”.



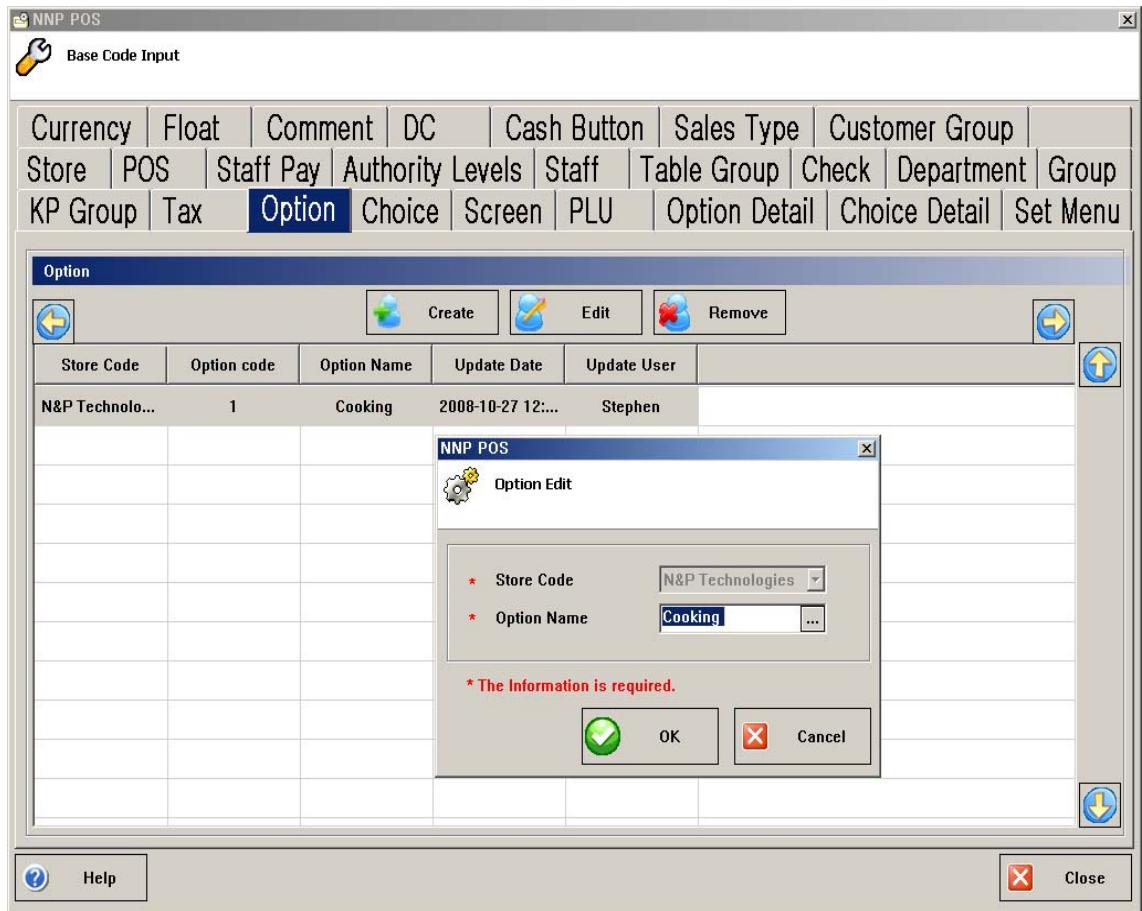
J. K. Using a *Tax list* at the store.

- You can make different “**Tax rates**” that are linked to the PLU.



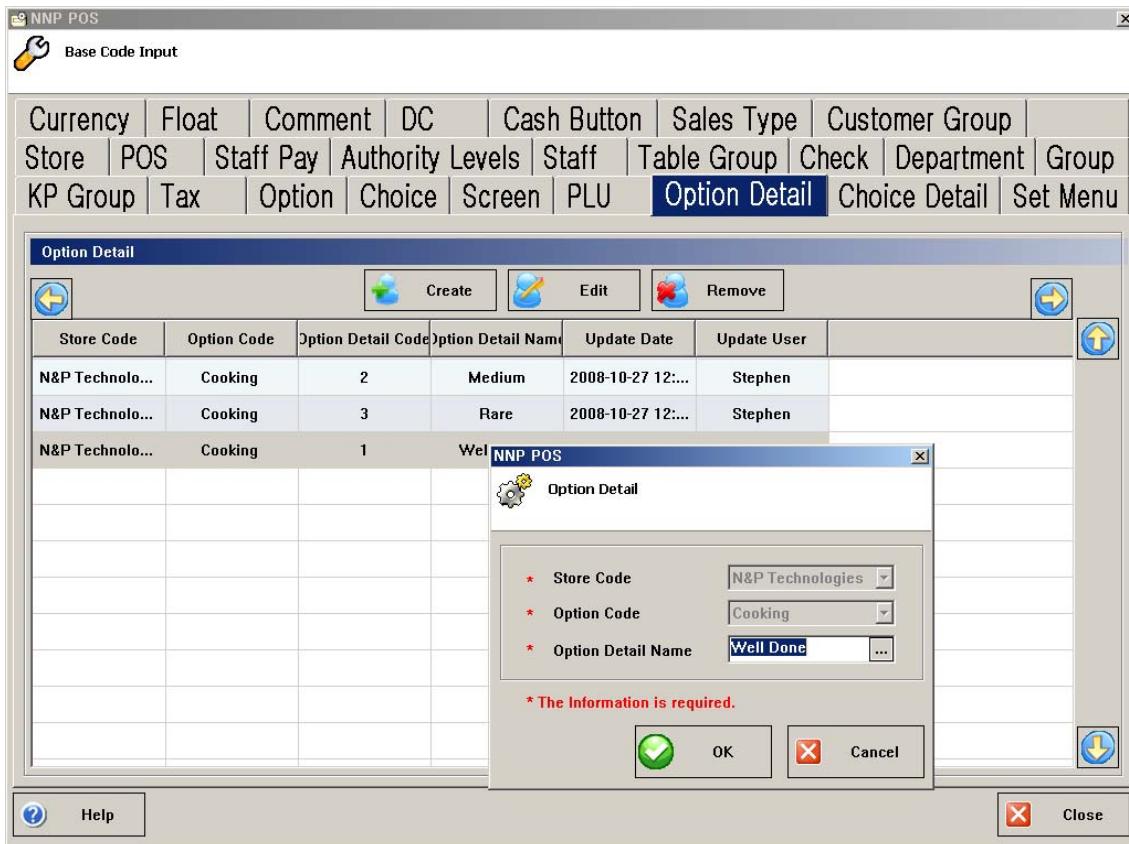
K. L. Pop-up screen – *Options*.

- You can make various Option Screens that have Option Details.
- You can create PLUs with Options. When ordering the PLU, the option screen will Pop-up ... for choosing option details.
- For example, the Steak PLU can have an **option** screen for **cooking**, and the cooking screen can have **three option details** of Well Done, Medium or Rare.



L. M. *Option Details*.

- Below, the **OPTION DETAIL SCREEN** shows the “**Option Detail Name**” for WELL DONE.



M. N. Pop-up screen -- Choices

- You can make many Choice screens that have Choice details.
- You can create a PLU that has a Choice screen. When ordering the PLU, the Choice screen will pop-up for choosing a Choice detail.
- A Choice Detail is one of the PLU (Menus), so you need to make a PLU that can be used as a Choice **Detail item** ... ahead of doing a **Choice Detail Tab**.
- For example, you can set the PLU to have a dessert screen that has three choice details such as Coffee, Tea or Ice cream.



Currency	Float	Comment	DC	Cash Button	Sales Type	Customer Group
Store	POS	Staff Pay	Authority Levels	Staff	Table Group	Check
KP Group	Tax	Option	Choice	Screen	PLU	Option Detail

Choice

	Create		Edit		Remove
Store Code	Choice Menu Code	Choice Menu Name	Update Date	Update User	
N&P Technolo...	1	Dessert	2008-10-27 12:...	Stephen	

NNP POS
Choice Edit

* Store Code N&P Technologies
* Choice Menu Name Dessert

* The Information is required.

OK Cancel

Help Close

Tax Option Choice Screen PLU Option Detail Choice Detail

NNP POS
Choice Detail

* Store Code N&P Technologies
* Choice Code Dessert
* Menu Code ACHARI GOSHT

* The Information is required.

OK Cancel

N. O. PLU (Menu) – Creation.

 Base Code Input

Currency	Float	Comment	DC	Cash Button	Sales Type	Customer Group
Store	POS	Staff Pay	Authority Levels	Staff	Table Group	Check
KP Group	Tax	Option	Choice	Screen	PLU	Option Detail
						Choice Detail
						Set Menu

Menu Information

Store Code	Menu Code	KP Group	Menu Second Name	Sale Price 1	Tax Code	Set Kind
N&P Technolo...	20	MAINS	ACHARI GOSHT	8,411.000000	VAT2	Standard
N&P Technolo...	14	LIQUERS	AMERITTO	369,999.000000	FREE	Standard
N&P Technolo...	22	PORT/SHERRY	AMONTILLAPO	9,999.000000	VAT1	Standard
N&P Technolo...	35	SOFT DRINKS ...	APPLE JUICE	7.000000	FREE	Standard
N&P Technolo...	38	TANDOOR	BARAH KEBAB	22.000000	FREE	Standard
N&P Technolo...	47	Whiskey	BLACK BUSH	2.650000	FREE	Standard
N&P Technolo...	10	DESSERTS/ C...	BLACK COFFEE	6,300.000000	VAT1	Standard
N&P Technolo...	1	COGNAC/COC...	BRAMBLE	50,000.000000	VAT1	Standard
N&P Technolo...	19	MAINS	CHICKEN BHAGARA	15,222.000000	FREE	Standard
N&P Technolo...	46	Whiskey	CHIVASREGAL	1.230000	FREE	Standard
N&P Technolo...	32	SOFT DRINKS ...	COCA COLA	67.000000	FREE	Standard

 Help  Close

 Menu Edit

Menu Edit

* Store Code	N&P Technologies	* Department	Sprit	<input type="checkbox"/> Any Price
* Menu Name	BLACK BUSH	* Group	Sprit	<input type="checkbox"/> Stock
Menu Second	BLACK BUSH	* KP Group	Whiskey	<input type="checkbox"/> Standalone Stock
* Tax Code	FREE	* Set Kind	Standard	<input checked="" type="checkbox"/> Menu Use
Store Number	all	* Price Level	Default	<input type="checkbox"/> Condiment
Option 1	Select	Choice 1	Select	Kitchen Printer 1
Option 2	Select	Choice 2	Select	Kitchen Printer Select
Option 3	Select	Choice 3	Select	Kitchen Printer Select
Option 4	Select	Choice 4	Select	Kitchen Printer Select
Option 5	Select	Choice 5	Select	Kitchen Printer Select
* Basic price	2.650000	Sale Price 5	Select	Menu DC 1 Select
Sale Price 1	0.000000	Sale Price 6	0.000000	Menu DC 2 Select
Sale Price 2	0.000000	Sale Price 7	0.000000	Menu DC 3 Select
Sale Price 3	0.000000	Sale Price 8	0.000000	Menu DC 4 Select
Sale Price 4	0.000000	Sale Price 9	0.000000	Menu DC 5 Select

* The Information is required.

 OK  Cancel

Menu Name : Name that is used for reporting, REG window, Kitchen printer ... etc.

Menu Second : You can give the menu a second name.

- This is a very useful feature when the Menu Name uses a local language, and the second Menu name uses another country's language.