Logic Controls Kitchen Display System User Manual



This User Manual contains brief description of Kitchen Display System and includes detailed information regarding installation and operation

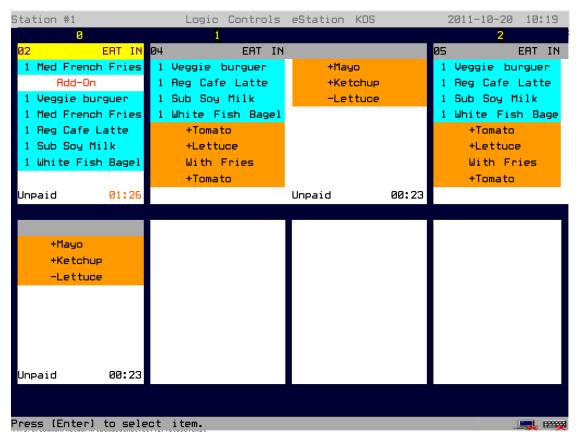
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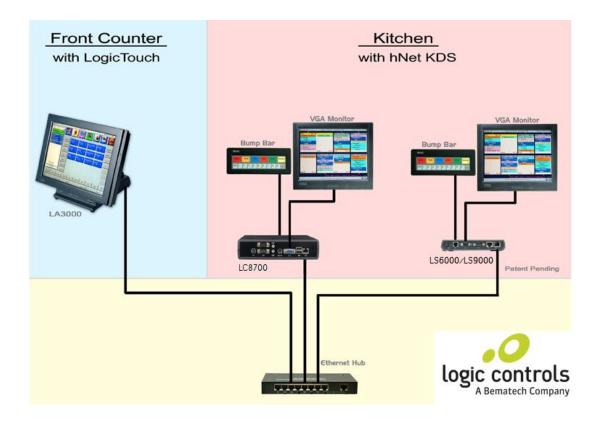
Introduction to the KDS

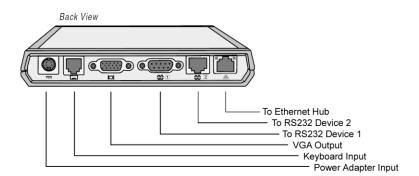
LCKDS is short for Logic Controls Kitchen Display System. It is also referred to as KDS Manager. This system transfers orders from the front counter POS systems to the back kitchen stations automatically (by displaying the orders on the station's screens and/or printing them through the terminal printer.). Meanwhile, kitchen staff can easily handle the orders (bump, unbump, show summary, and so on) using the customized bump bars to do their job effectively. Therefore, KDS will enhance the communication within a busy restaurant kitchen and manage all processes more efficiently.



LS9000 Order Screen Sample

Hardware Connections





LS6000 Back View

Connect LS6000/LS9000 eStation(s), Server (any computer installed LCKDS software), and POS terminals to Ethernet hub/switch with standard Ethernet network cables. If users have only one LS6000/LS9000 eStation, a cross-over Ethernet cable can be used to connect the computer running LCKDS and the single LS6000/LS9000.

Note that if users want to use LC8600/LC8700 as kitchen station to visualize the same function of LS6000 eStation, the Kitchen_hNet (LS6000 simulator) software is needed to

be installed in LC8600/LC8700. After installing the simulator, by default Kitchen_hNet software should locate in c:\Program Files\Logic Controls KDS\hNet folder.

Connect the VGA monitor to video port of LS6000/LS9000 eStation.

Connect the KB1700 bump bar to the RJ11 keyboard input port of LS6000 eStation or to the PS2 port of the LS9000. On the bump bar side, the cable should plug in the RJ11 port that is close to Enter Key of bump bar.

Plug the power adapter cable into LS6000/LS9000 eStation and to the wall outlet. Each time the LS6000/LS9000 is powered on, it will run a self diagnostic and display the system information on the screen. There is a ROM-based setup that is used to set system parameters. To enter the setup program, as soon as the system information screen appears during boot up, quickly press [Delete] or [Down Arrow] key on the bump bar or keyboard. For the LS9000, the booting time takes longer but users have the same option to change the settings of the unit.

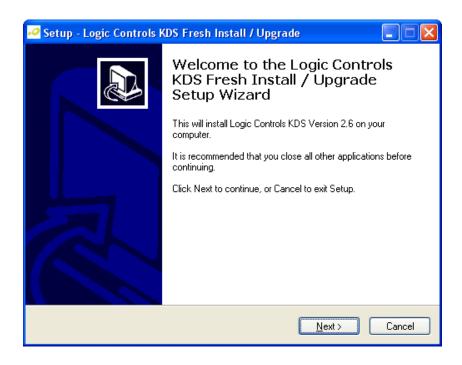
Scroll to Ethernet menu to set up the IP address and TCP port. Check with system administrator for proper settings. Note that the IP address must match the IP group of the host server and the TCP port address must match the port number used by the LCKDS application software. All LS6000/LS9000 must have their unique IP addresses different from each other and any other computer equipment on the network. If any parameters have been changed, press [F10] or [Ctrl] key to save the parameters and exit setup.

After booting up normally, a blue screen with configuration box should appear on the VGA screen. The Ethernet status line should display "Connected", otherwise check the cable connections. The IP address and TCP port number will also be shown in the configuration box on the screen.

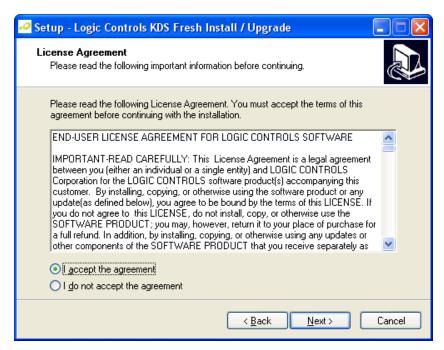
LCKDS Installation and Operation

Setup the IP addresses to assure that the Server, POS terminals, and LS6000/LS9000 eStation(s) are within the same subnet. To see the IP address of LS6000/LS9000, plug in the power adapter and press the bump bar "down arrow" button to enter into the setup menu. Next press a side arrow button to choose the Ethernet menu. Press the down arrow button again to modify the IP address.

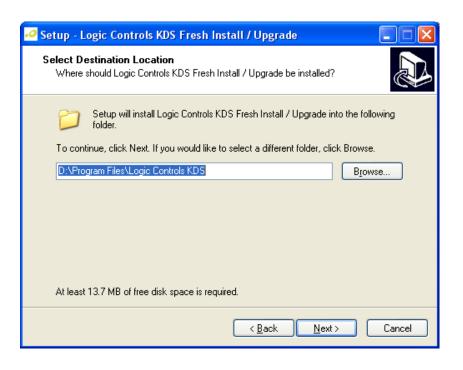
Run Setup.exe and follow the steps below to complete the installation. Setup 1 (Welcome screen):



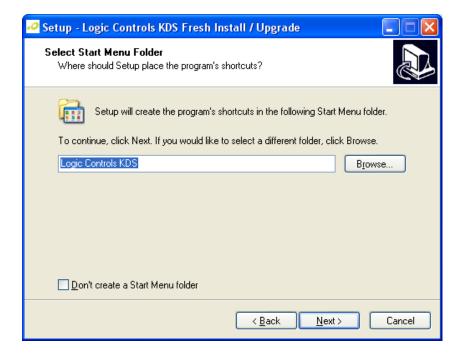
Setup 2 (License Agreement):



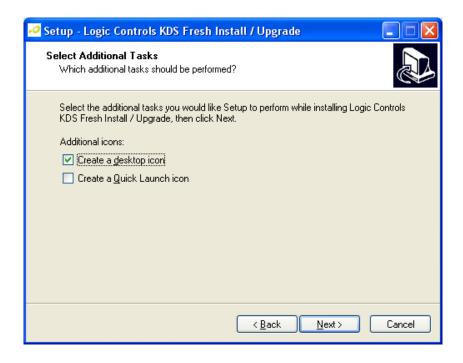
Setup 3 (Select Destination Location):



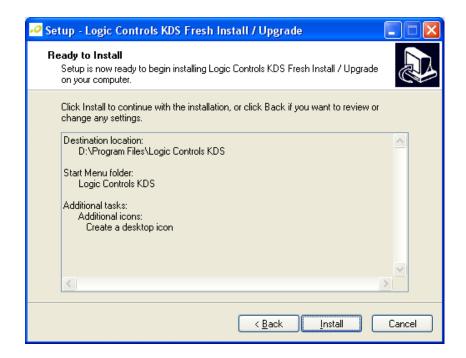
Setup 4 (Select Start Menu Folder):



Setup 5 (Create a desktop icon):



Setup 6 (Ready to install):



LCKDS Setting

Please note:

Before changing KDS setting, if KDS is running, please **STOP** the KDS service (click on the three-way computer network icon button on the top-left corner).

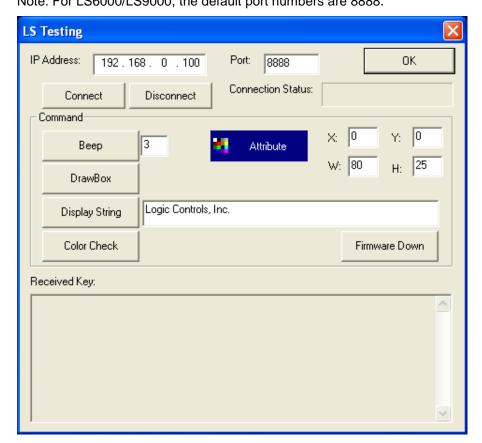
After finishing the change, please restart the KDS service (by click on the same icon).

(**Note:** When the KDS is stopped, the three-way computer network icon will change to "Run"; when the KDS is started, the icon will change to "Stop")

Testing KDS Manager

Open KDS Manager, and click "LS Testing" button on the top toolbar, enter the IP address and port numbers of LS6000/LS9000 eStation to test the connections.

Note: For LS6000/LS9000, the default port numbers are 8888.



Language Setup

Currently, KDS supports English, Simplified Chinese, Traditional Chinese, and Italian. (Please note that for Italian; currently KDS only translates Messages displayed on LS6000 screen into Italian and GUI is not in Italian yet. In order to display orders and messages in a different language(e.g. Italian), users need to configure KDS by two steps as below.)

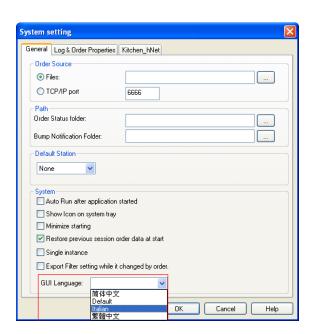
Step 1:



Click Sys Setting

button on the top, choose System setting and select

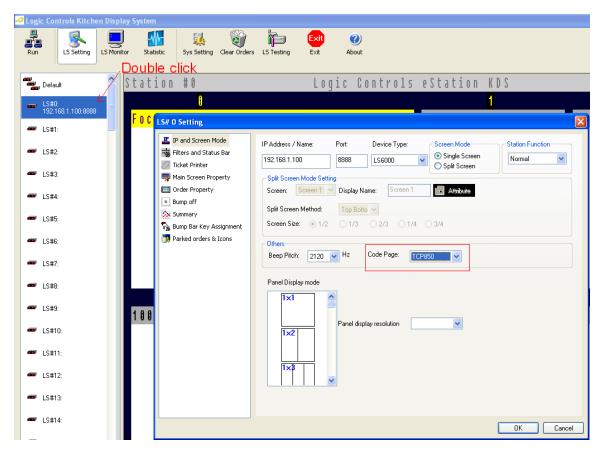
Italian:





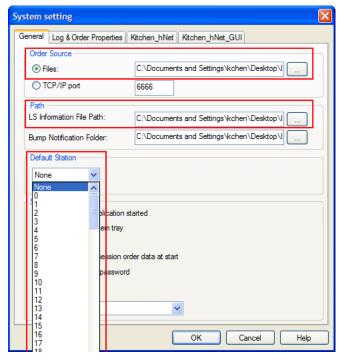
Step 2: Click

and:



Select the appropriate code page that matches what your POS is using to create the xml orders.

Order File Source, LS Information File path and Default station



Click "Sys Setting" button on the top toolbar of KDS_MANAGER, and then click the browse button on the right of Order File Source Path to select the order file path (Default is C:\Program Files\Logic Controls KDS\orderinfo\)

Click the browse button on the right of LS Information File Path to select the order status path (Default is C:\Program Files\ Logic Controls KDS\orderstatus\).

Order Status processing procedure:

Generate a request XML file and drop into orderinfo folder. See the following sample. For detailed description of those tags, please look at "XML Description.txt" file in C:\Program Files\Logic Controls KDS\ForPOSDevelopment\

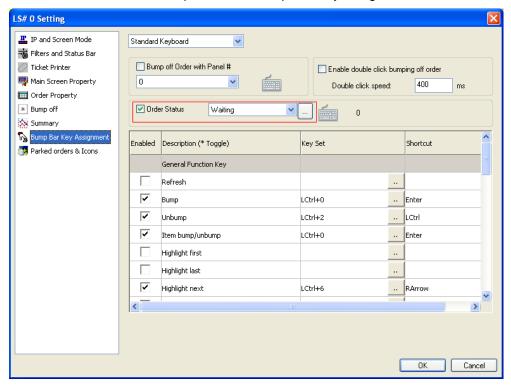
Request XML Sample:

```
<Transaction>
<Order>
<ID>2006</ID>
<PosTerminal>2</PosTerminal>
<TransType>5</TransType>
<ServerName>Any</ServerName>
<Destination />
<GuestTable />
<UserInfo />
```



Note: <TransType>5<TransType> is used to request the kitchen status of the order. Therefore, Users have to make sure that the order is on the screen.

Make sure the Order Status option under Bump Bar Key Assignment is checked.



Once KDS is running, it will automatically reads this XML file (and any xml order files placed in the orderinfo folder) and display the status request for user to select on the bottom line of Kitchen controller monitor.

Note: TransType 5 only applies to the normal stations. It will not work on expediter. There are total 4 statuses (0-"Waiting", 1-"Processing", 2-"Delivering to Counter", 3-"Sold out"). Once the user selects the status, KDS will automatically generate a feedback xml file and drop this file into order status folder for POS to read.

Feedback status sample:

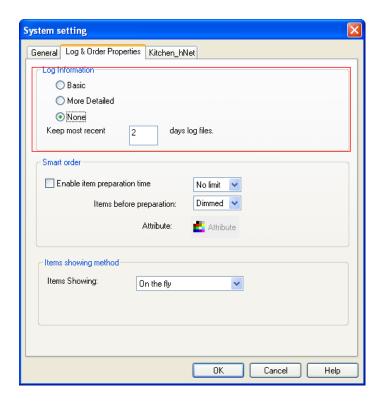
```
<Transaction>
<Order>
<ID>2006</ID>
<KitchenStation>0</KitchenStation>
<KitchenStatus>Processing</KitchenStatus>
</Order>
</Transaction>
```

Note: For the parked orders, users do not need to select anything. The KDS will generate a parked status XML file to the order status folder

User can select one of the stations to be the default station for the new items which do not belong to any category and for the categories without primary or slave station. For instance, if a new category – unknown to KDS Manager - is created in the POS application, this is the station where new items belonging to that category will be sent.

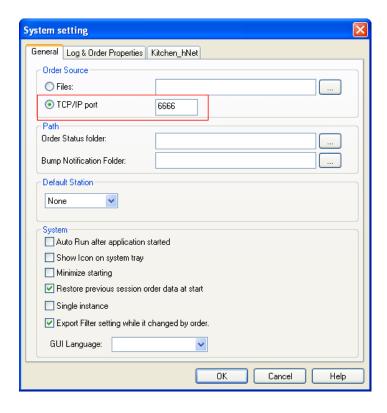
Specify the Log File Type

Default is none. If users want to **optimize the performance** of the KDS, users should select "None" as log file type. This option is mainly used for debugging and troubleshooting purposes.



TCP/IP port

If the user selects this option, the POS software will interface with KDS manager through a TCP/IP socket instead of the regular dropping file mechanism (usually in a network shared source folder). Users can select the port that KDS manager listens to, as shown below:



The order data should be sent through the socket with the specified format (protocol) shown below:

<STX> <COMMAND><LEN-HIGH> <LEN-LOW> <DATA/PAYLOAD> <ETX>

```
<STX> = 0x02
```

<COMMAND> = 0x05

<LEN-HIGH> =data length (payload), high byte

<LEN-LOW> = data length (payload), low byte

<DATA> = xml file contents

<ETX> = 0x03

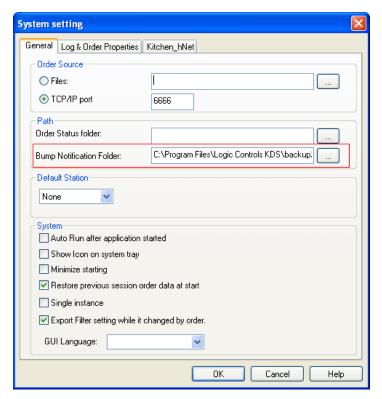
Here is a simple example (in C#) showing tcp connection and placement of the data in the envelope described above:

```
TcpClient client = new TcpClient(AddressFamily.InterNetwork);
private void btnSend_Click(object sender, EventArgs e)
   client.Connect(textBoxIP.Text, Int32.Parse(textBoxPORT.Text)); //Connect specified
  IP and Port
       if (client.Connected)
            foreach (string filename in lstFiles.Items)
              send_file(filename);
              }
          client.Close();
private void send_file(string filename)
string s = File.ReadAllText(filename);
send_string(s);
private byte[] convert(string s, string cp) //Convert the data into utf8 bytes
System.Text.Encoding utf8 = System.Text.Encoding.GetEncoding(cp);
return utf8.GetBytes(s);
private void send_string(string s)
byte[] utf8 = convert(s, "utf-8");
//Full packet = stx + command + high + low+ payload + etx
int nlen = utf8.Length + 5; //Length of full packet is length of payload + 5
byte[] buf = new byte[nlen];
buf[0] = 0x02; //stx
buf[1] = 0x05; //command
buf[2] = (byte) (utf8.Length >> 8); //high byte
buf[3] = (byte)(utf8.Length); //low byte
```

```
utf8.CopyTo(buf, 4); //payload
buf[4 + utf8.Length] = 0x3; //etx
NetworkStream stream = client.GetStream();
stream.Write(buf, 0, buf.Length);
stream.Close();
}
```

Note: Always remember to choose the right order source. If the TCP/IP is selected, the local order folder source will be disabled.

Bump Notification



In the top toolbar, click "Sys Setting" button, users can enter a folder for storing bump notification xml files. KDS will automatically drop a bump notification XML file to this folder, once users bump/unbump item(s)/order(s).

```
<BumpType> tag definition:

1 – kitchen station item bump

2 – kitchen station order bump

3 – expeditor station item bump

4 – expeditor station order bump

5 – kitchen station item unbump

6 – kitchen station order unbump

7 – expeditor station item unbump

8 – expeditor station order unbump
```

For bump Order/Item, there are 2 tags regarding to time.

```
<Received_Time> and <Bumpoff_Time>
For unbump/restore Order/Item, there are 2 tags regarding to time.
<Received_Time> and <Restored_Time>
```

Note: Please use web browser (e.g. IE or Firefox) to view the content xml files.

The sample xml file of **item bump** notification:

```
<Transaction>
<Order>
<ID>1</ID>
<PosTerminal>28626560</PosTerminal>
<TransType>1</TransType>
<OrderStatus>0</OrderStatus>
<OrderType />
<ServerName>Annie
<Destination>EAT IN/Destination>
<GuestTable />
<Received_Time>2011-10-28 09:15:56
<Bumpoff_Time>2011-10-28 09:16:04
<Item>
<ID>1</ID>
<TransType>1</TransType>
<Name>Med French Fries</Name>
<Category>Fry</Category>
<Quantity>1</Quantity>
<PreModifier>
<Count>0</Count>
</PreModifier>
<Color BG="180" FG="215" />
</Item>
<BumpType>1</BumpType>
<IPAddr>10.140.100.64</IPAddr>
</Order>
```

```
</Transaction>
```

The sample xml file of item **unbump/restore** notification:

```
<Transaction>
<Order>
<ID>1</ID>
<PosTerminal>15118768</PosTerminal>
<TransType>1</TransType>
<OrderStatus>0</OrderStatus>
<OrderType />
<ServerName>Aany</ServerName>
<Destination>EAT IN/Destination>
<GuestTable />
<Received_Time>2011-10-28 13:09:40</Received_Time>
<Restored_Time>2011-10-28 13:44:00/Restored_Time>
<Item>
<ID>1</ID>
<TransType>1</TransType>
<Name>Bagel cream chez</Name>
<Category />
<Quantity>1</Quantity>
<PreModifier>
<Count>0</Count>
</PreModifier>
<Color BG="180" FG="215" />
</Item>
<BumpType>5</BumpType>
<IPAddr>10.140.100.64</IPAddr>
</Order>
</Transaction>
```

The sample xml file of **order bump** notification:

```
<Transaction>
<Order>
<ID>1</ID>
<PosTerminal>15118768</PosTerminal>
<TransType>1</TransType>
<OrderStatus>1</OrderStatus>
```

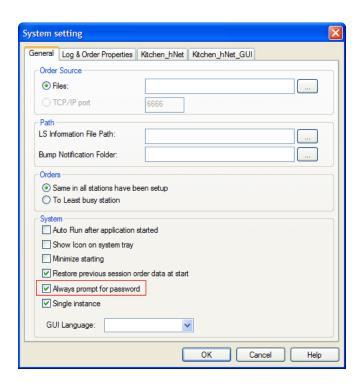
```
<OrderType />
<ServerName>Aany</ServerName>
<Destination>EAT IN/Destination>
<GuestTable />
<Received_Time>2011-10-28 13:09:40</Received_Time>
<Bumpoff_Time>2011-10-28 13:41:13
<Item>
<ID>1</ID>
<TransType>1</TransType>
<Name>Bagel cream chez</Name>
<Category />
<Quantity>1</Quantity>
<PreModifier>
<Count>0</Count>
</PreModifier>
<Color BG="180" FG="215" />
</Item>
<Item>
.....
</Item>
<BumpType>2</BumpType>
<IPAddr>10.140.100.64</IPAddr>
</Order>
</Transaction>
```

The sample xml file of order **unbump/restore** notification:

```
<Transaction>
<Order>
<ID>1</ID>
<PosTerminal>15118768</PosTerminal>
<TransType>1</TransType>
<OrderStatus>1</OrderStatus>
<OrderType />
<ServerName>Aany
<Destination>EAT IN/Destination>
<GuestTable />
<Received_Time>2011-10-28 13:09:40</Received_Time>
<Restored_Time>2011-10-28 13:44:00/Restored_Time>
<Item>
<ID>1</ID>
<TransType>1</TransType>
<Name>Bagel cream chez</Name>
<Category />
<Quantity>1</Quantity>
.....
</Item>
<BumpType>6</BumpType>
<IPAddr>10.140.100.64</IPAddr>
</Order>
</Transaction>
```

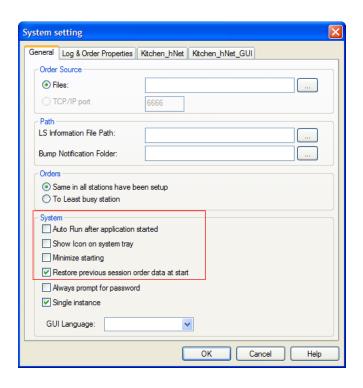
Login Password Control

The default login name is "Admin" and password is "bematech". To have the system no prompting the password, go to "Stop KDS->Sys Setting->System Setting->Uncheck 'Always prompt for password'->Start KDS".



Other settings in the Sys Setting

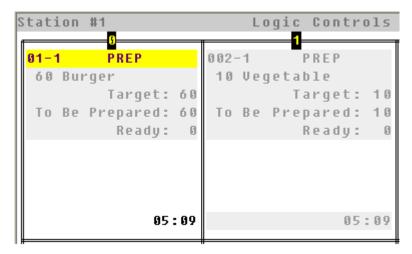
In System Setting, users can configure other settings. For example, by checking "Restore previous session order data at start" checkbox, users will be able to restore previous orders info, when application starts. Unchecked the checkbox, KDS Manager will clean all previous orders at start up. If users want to see the KDS Manager icon in the lower right corner, check "Show icon on system tray". If users want to run the application immediately (controlling the units) when it is launched, check "Auto Run after application started". If users want to start the KDS Manager minimized (no GUI), check "Minimize starting".



Schedule

A quick service feature allows a restaurant to prepare the daily production in advance. With this feature, store manager can select a trigger time for any day of the week and choose quantity and descriptions of items to be prepared in the Kitchen. KDS Manager will check the all existing schedule, and when time is up, KDS Manager will send an "Inhouse" order with the items to be prepared. The "Inhouse" schedule order has three properties (Shown Below): Target (Quantity that need to be prepared), To Be Prepared (Will be same as Target by default, will deduct when Chef input Ready quantity), and Ready (Quantity that Chef input by Bump Bar). When orders come in with items already prepared, KDS manager will automatically mark those items as ready, and reduce the "Ready" quantity. When the Schedule Order is focused, the chef can push the bump bar "Enter" key, and uses the numeric key on the bump bar to enter "Ready" quantity: The "Ready" quantity is increased by this quantity and "To Be Prepared" is reduced by this quantity.

Note: If you change the schedule setting when KDS is running, make sure to restart KDS to let the change take effect.



For example, store manager knows, based on his history, that Monday, Wednesday and Friday are the busiest lunch hour of the whole week. So he can setup KDS to start preparing 100 burgers at 11:45 AM for these 3 days. And for Tuesday and Thursday, he needs only 60 burgers to be produced in advance, this can be setup accordingly. KDS Schedule, when used, is based on a weekly period, and recurrent over the year.

Schedule set up: click [Sys Setting] -> [Schedule] will bring you into The Schedule set up page as shown below (Figure 1). Double click on any time slot to set up a schedule, this will bring you to figure 2 as show below.

Figure1.

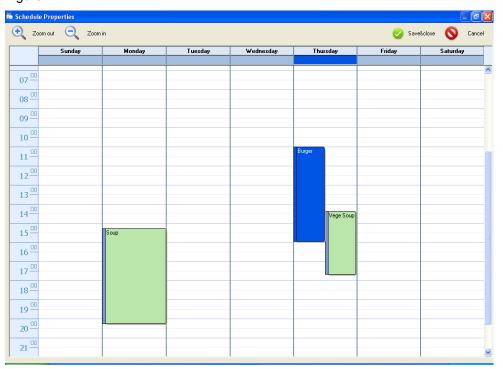
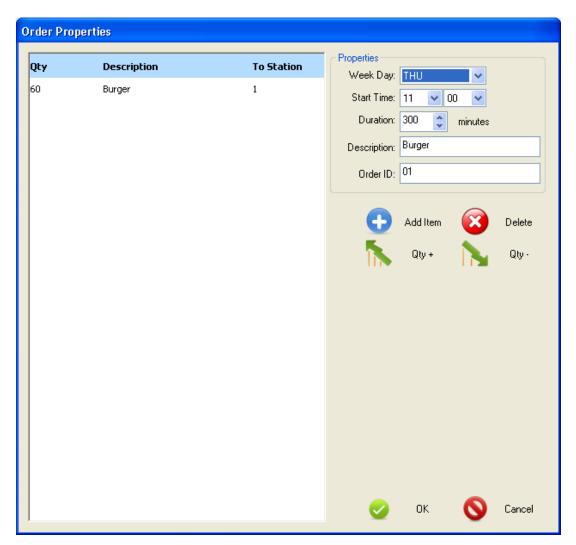


Figure 2.

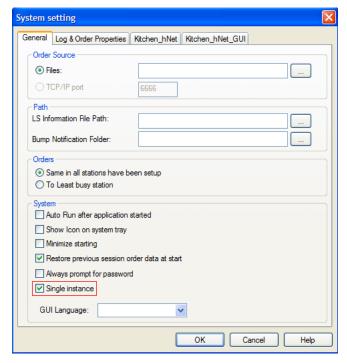


Select the start time and duration, then input Description and order ID, next click add item will bring you to item filter setting where you have all your items stored. To change the quantity, click on the item, and use Qty+ and Qty- to adjust item Qty. To assign a station for that item, click To Station column.

Note: Schedule order handles orders as first in first out order(Ex: When chef inputs 3 Ready qty to burger, Order #1 comes in with 5 burgers, Order #2 comes in with 2 burger, schedule will not mark Order #2 as ready. It will wait until order #1 finish), if there is no ready qty when orders come in, "To Be Prepared" qty will increase by the order quantity. After duration passes, schedule order's Target and To Be Prepared amount will reduce to 0, if there's no Ready qty, it will auto bump off. And if there is "Ready" qty left over, it will keep working until all Ready qty is done.

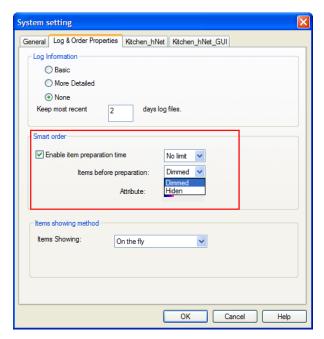
Single Instance

KDS Manager supports multiple instances of software. In the other words, users can run multiple KDS Managers on one PC. If users required having only one instance of the application running at any moment, check the option "Single instance".



Smart Order

This option enriches the process of food preparation at the kitchen by using a powerful delay algorithm that allows items to be served / prepared at the right time. If users check this opinion, the KDS Manager will handle the order in its "smart way". There are two different options to work with order items that are not yet to be prepared: Dimmed and Hidden. When dimmed is selected (default), waiting items appear on the screen with light gray colors. When hidden is selected; only the items that are ready to be prepared are shown on the screen.



A particular Sample:

Configure the Item Filter Setting as below (For more detailed Item Filter Setting configuration, refer to <<Filters and Status Bar>>)

```
<Filter>
<Category Name="Appetizer" BG="17" FG="224" PrimaryStation="0" SlaveStation="" Delay="0">
<Item Name="French Fries" PrimaryStation="" SlaveStation="" PrepTime="3.00" PrepFactor="0.00" />
<Item Name="Onion Rings" PrimaryStation="" SlaveStation="" PrepTime="2.00" PrepFactor="0.00" />
<Item Name="Olives and Cheese" PrimaryStation="1" SlaveStation="" PrepTime="1.00" PrepFactor="0.00" />
< Item Name="Crackers w Cheese" PrimaryStation="1" SlaveStation="" PrepTime="3.00" PrepFactor="0.00" />
<Category Name="Subsalads" BG="185" FG="224" PrimaryStation="1" SlaveStation="" Delay="2">
<Item Name="Ceasar Salad" PrimaryStation="" SlaveStation="" PrepTime="3.00" PrepFactor="0.00" />
< Item Name="Greek Salad" PrimaryStation="" SlaveStation="" PrepTime="2.00" PrepFactor="0.00" />
<Item Name="Potato Salad" PrimaryStation="" SlaveStation="" PrepTime="1.00" PrepFactor="0.00" />
</Category>
<Category Name="Entrees" BG="200" FG="0" PrimaryStation="2" SlaveStation="" Delay="3">
<Item Name="Baby shrimp Salad" PrimaryStation="1" SlaveStation="" PrepTime="1.00" PrepFactor="0.00" />
<Item Name="Eggplant Parmegiana" PrimaryStation="" SlaveStation="" PrepTime="2.00" PrepFactor="0.00" />
<Item Name="House Fettucine" PrimaryStation="" SlaveStation="" PrepTime="3.00" PrepFactor="0.00" />
< Item Name="Cheese Ravioli" PrimaryStation="" SlaveStation="" PrepTime="4.00" PrepFactor="0.00" />
<Item Name="Grilled Veggies" PrimaryStation="" SlaveStation="" PrepTime="5.00" PrepFactor="0.00" />
</Category>
<Category Name="Pizza" BG="200" FG="0" PrimaryStation="0" SlaveStation="" Delay="0">
```

```
<Item Name="Pizza Margherita" PrimaryStation="" SlaveStation="" PrepTime="1.00" PrepFactor="0.00" />
    </Category>
    </Filter>
```

Categories and items have "Delay time" or "Preparation time" (in minutes), respectively, in this XML filter sample. If a category has a "Delay" of 2 (such as "subsalads"), items belonging to that category will be delayed 2 minutes before they are displayed at the preparation station(s). The purpose of this delay is to have, in a table service environment, the appetizers prepared first and then followed up by salads and entrees. Furthermore, the item which takes the most time to prepare in each category will be the first one to appear. In the same example, if an item has a "PrepTime" of 3.00 (Such as "Ceasar Salad") under the same category, it will appear on the screen right after the category delay has elapsed. The Greek Salad will appear one minute after Ceasar Salad because of its shorter preparation time.

Note: The items from different categories could appear at the same time based on this algorithm. Check the example below. Send an order to the KDS Manager as shown below

```
<Transaction>
<Order>
<ID>02</ID>
<PosTerminal>1</PosTerminal>
<TransType>1</TransType>
<OrderStatus>0</OrderStatus>
<OrderType />
<ServerName>Annie
<Destination>EAT IN/Destination>
<GuestTable />
<UserInfo />
<IconIndex>0</IconIndex>
<Item>
<ID>1</ID>
<TransType>1</TransType>
<Name>French Fries</Name>
<Category>Appetizer</Category>
<Quantity>1</Quantity>
</Item>
<Item>
<ID>2</ID>
<TransType>1</TransType>
```

```
<Name>Onion Rings</Name>
<Category>Appetizer</Category>
<Quantity>1</Quantity>
</Item>
<Item>
<ID>3</ID>
<TransType>1</TransType>
<Name>Ceasar Salad</Name>
<Category>Subsalads</Category>
<Quantity>1</Quantity>
</Item>
<Item>
<ID>4</ID>
<TransType>1</TransType>
<Name>Greek Salad</Name>
<Category>Subsalads</Category>
<Quantity>1</Quantity>
</Item><Item>
<ID>5</ID>
<TransType>1</TransType>
<Name>Eggplant Parmegiana</Name>
<Category>Entrees</Category>
<Quantity>1</Quantity>
</Item>
<Item>
<ID>6</ID>
<TransType>1</TransType>
<Name>House Fettucine</Name>
<Category>Entrees</Category>
<Quantity>1</Quantity>
</Item>
</Order>
</Transaction>
```

The system will behave according to the description table below (consider order arrival time 10:00)

Time	System Status	
10:00	French fries are shown on the Fry station (#0) with colors, All	
	other items are shown dimmed.	
10:01	Onion rings are shown with colors on the Fry station (#0).	

10:02	Caesar Salad is shown with colors on station #1	
10:03	Greek Salad and House Fettucini are shown with colors on	
	station #2	
10:04	Egg Plant appears on station #2 on colors.	

Transfer Order

Allow users use Bump Bar or modify in XML tags to transfer orders between stations.

E.g.: Chef by accident bumps an order to expeditor station; waiter doesn't see the food ready. He can transfer bump the order back to chef's station.

In order for this feature to work, you need to enable "Transfer order to other station" function in Bump bar key assignment. Or with XML tags, first the orders need to be in <TransType>4</TransType>

- <!-- 4 transfer order to others station, see transfer tag -->, and add
- <Transfer FromStation="3:0" ToStation="3:1"/> tag into the XML orders.

Items showing method

Items can be shown in three different ways on the screen. The default Items showing method is "on the fly".

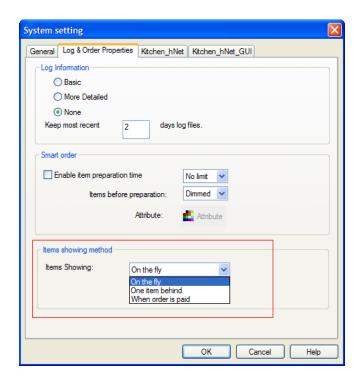
If users choose "on the fly", users can see all the items on the screen right after the xml order was processed by KDS Manager.

If users choose "one item behind", the last item sent is always hidden at each station.

When the order status changed to "Paid" (the POS writes and xml order file with

<OrderStatus>1</OrderStatus>) the last item will be shown.

If users choose "when order is paid", items will be displayed when the order is "Paid".



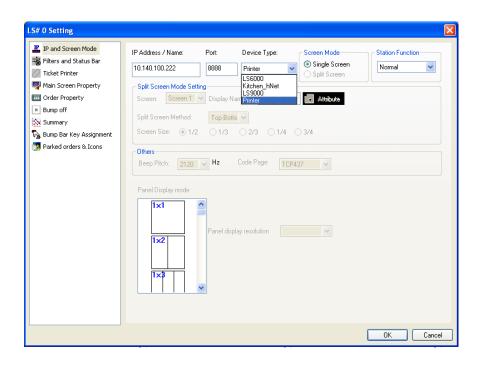
Send orders/items to Multiple KDS stations

Allow KDS sends orders to multiple KDS stations at the same time with tag <KDSStation>x,y,z</KDSStation> and <KDSStation>x:y,m:n</KDSStation>:

E.G.: <KDSStation>5:0,4:1</KDSStation> , with this tag in xml, orders/items will send to station 5 screen 0, and station 4 screen 1. And <KDSStation>0,1</KDSStation> sends orders to station 0 and 1.

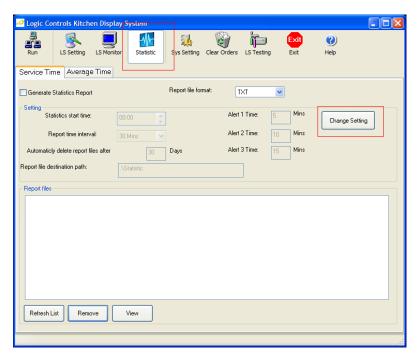
Ethernet Printer

A new device type for Bematech's printer: MP4200. This enables KDS sends orders directly to Printer station.



Statistic Report

Once "Generate Statistics Report" is checked, the KDS starts generating statistics report files **daily** according to the settings (start time, report time interval, automatically delete report file, alert times, etc.), and the report will be generated in .\Statistic folder. Users can change the settings by clicking "Change Setting" button and fill in the desired values. Furthermore, users can highlight the specified report and click Remove/View button to remove/view the reports.



The <Statistics>button is used to gather statistics of finishing orders speed (the time expenses between orders arrive and are bumped off).

For example,

Between 11:00 and 11:30, there are 3 orders bumped. Between 11:30 and 12:00, there are 4 orders bumped.

"SvTime" is total preparation time. "Avg" is average preparation time.

Logic Controls KDS Service Time Report (Sample)

Report period start time: 00:00 10/17/2011 Report statistics time range: 30 minutes

SERVICE TIME BY TIME RANGE:

FastFood			
TIME	COUNT	SV TIME	AVG
30	0	0.0	-214
11:00	3	3.5	1.2
30	0	0.0	-214
12:00	4	2.5	0.6
30	0	2.5	-214
TOTAL	7	6.0	0.9

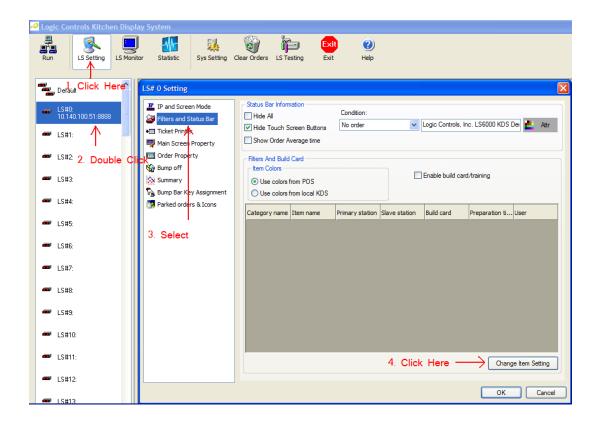
SERVICE TIME BY ALERT LEVEL:

FastFood	
SV TIME	COUNT
Under 5 mins	7
Under 10 mins	0
Under 15 mins	0
Over 15 mins	0
ALL	7

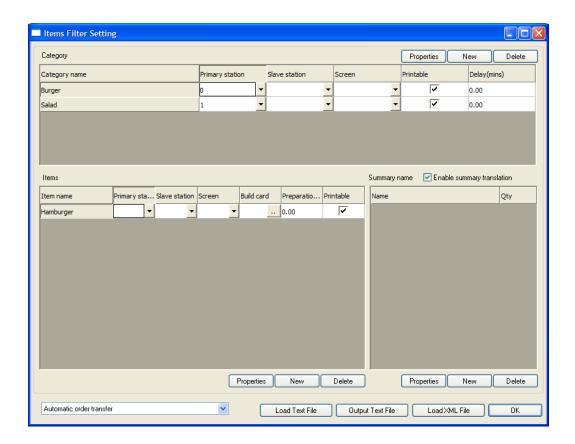
Filters and Status Bar

Item Filter Setting

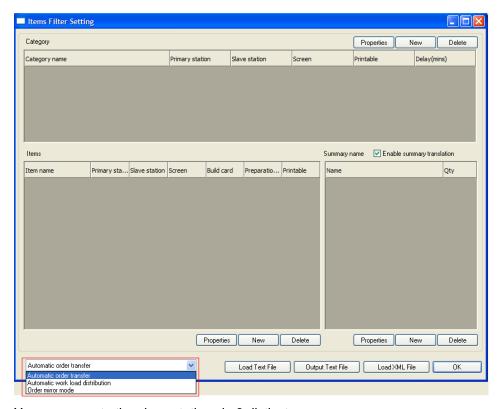
This option allows users to specify how the order items (by category or individually) will be displayed at the kitchen stations. Double-click "LS#0" on left column, a "LS Default Setting" window will pop-up. Select "Filter and Status Bar" node on the left side, and click "Change Item Setting" button to display "Item Filter Setting" window. In this window, if users have sent any items to KDS already, they will be shown here. You specify the primary station for any item in this screen. After done, save and exit. Restart KDS by clicking "Start" button on top toolbar.



You can route items to different preparation stations. For instance, an order may contain a hamburger and a salad. The burger can be redirected to preparation station 0 and the salad can be sent to station 1, streamlining the processing flow in the kitchen. An item can also be routed at the item level, overwriting the Primary station specified at the Category.



Slave Station Modes



You can operate the slave stations in 3 distinct ways:

1. Automatic order Transfer

If the primary station is down, items will be shown in the slave (backup) station.

Items Primary	Items Slave	Category Primary	Category Slave	Which?
Online	Online	Online	Online	Items Primary
Offline	Online	Online	Online	Category primary
Offline	Online	Offline	Online	Items Slave

2. Automatic work load distribution

Under this mode, the order will go to the Station with fewer orders on it, automatically.

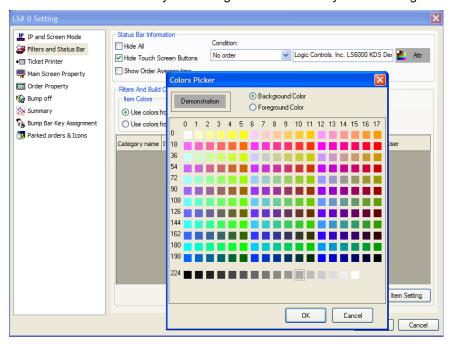
Primary	Slave	Which?
Online	Online	Station with fewer orders
Offline	Online	Slave
Online	Offline	Primary

3. Order Mirror Mode

The order is displayed on both primary and the slave station. After users bump an order either from primary or from slave station, the orders will be bumped off on both stations.

Set up categories and items

In the "LS# Setting" window, click "Filters and Status Bar". On the right panel, click "Change Item Setting", an "Items Filter Setting" window will pop up. On this window, it will automatically display the received categories & items. Normally KDS Manager will automatically add categories and items to its database by reading the transferred orders, but users still can manually add categories and items by the following 3 methods.



If no categories and items are displayed, users can either send a testing order with all categories or enter the categories & items by click "Edit Categories & Items Names" manually. In the "Item Setup" window, fill in the Category/Item to Text Box and click "Add Text as a new Category" / "Add Text as a new Item" button, then click "Attr" button on the right, a "Color Picker" windows will pop up. In this window, users can pick up both background and foreground colors. When finished, click OK and click "Update select text" button in the Items Setup window.

Click **<Load Text File>** button in the Items Setup window to load a text file containing the categories and items info. The background and foreground use 256 colors. The numbers can be got by summing up the numbers on both X and Y axis in the Color Picker window.

The imported filter content will be appended to the end of current filter. The txt file format is as following,

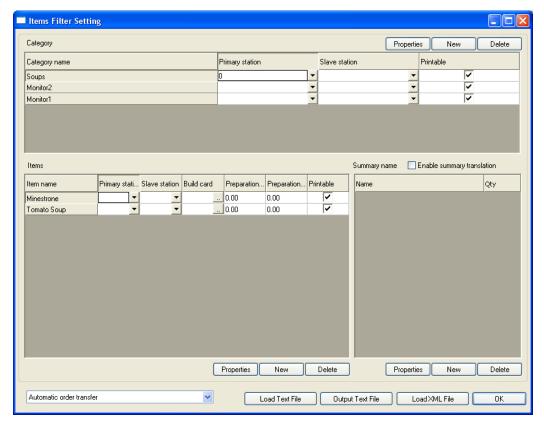
<category1></category1>	<bgcolor></bgcolor>	<fgcolor></fgcolor>
<item1></item1>		
<item2></item2>		
<category2></category2>	<bgcolor></bgcolor>	<fgcolor></fgcolor>
<item1></item1>		
<item2></item2>		

For example

Sandwich	12	216
Big Burger		
Cheeseburger		
Desserts	200	145
Cookies		
Chocolate		
Baked apple pie		

Click **<Load XML File>** button in the Items Setup window to load an xml file containing the categories and items info. The background and foreground use 256 colors. The numbers can be got by summing up the numbers on both X and Y axis in the Color Picker window. The imported filter content will overwrite the current filter content. The txt file format is as following,

For example:

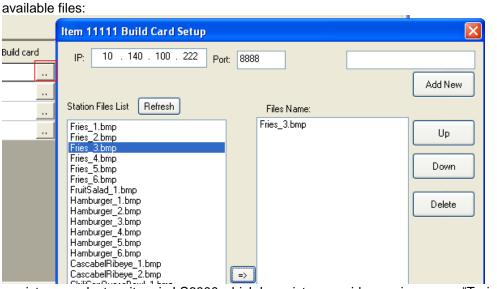


Please note: users can delete "c:\program files\logic controls kds\backup.db" file in order to delete all filter settings and then re-import or create filter content.

Pictures and video for a specific item

A combination key to play a picture or a video for an item in LS6000/LS9000

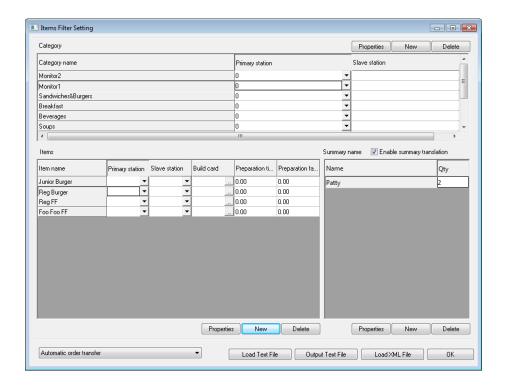
- Enable "Enable build card/training" in Filters and Status Bar setting
- Go to "Change Item Setting"; assign pictures and videos or both for some items, to do that click the ... as show below, a Windows will popup. Click Refresh to get list of



To display pictures, select an item in LS6000 which has picture or video assign, press "Training" key (assign in Bump bar key assignment)

Summary Translation

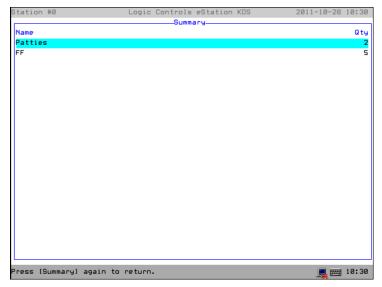
The Summary Translation allows an item to appear with different description (or quantity) on the LS6000/LS9000 **summary screen**. To do so, users have to create a translation table from the current item to the new desired description and quantity. This feature is useful for the cook to visualize, within a set of orders that share some main ingredient, how many of that shared ingredient must be prepared at one time. Ex: Different burgers (cheeseburgers, double burgers, and hamburgers) all contain one (or more) patty(s).



For example, Original Order contains following:

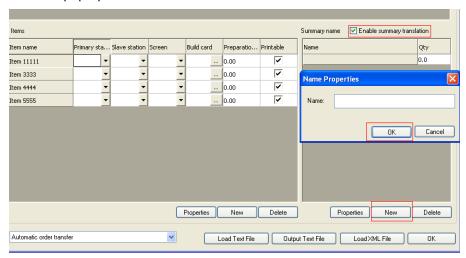
1 Reg. Burger, 3 Reg FF and 2 Foo Foo Fries

According to the settings, 1 Regular Burger includes 2 patties, 1 Reg FF is equal to 1 FF, and 1 Foo Foo Fries is equal to 1 FF, thus after users set up this translation table, users will see the following in the Summary Screen:



If you want to exclude items from summary and just want to see the ingredients, create a blank translation for those items.

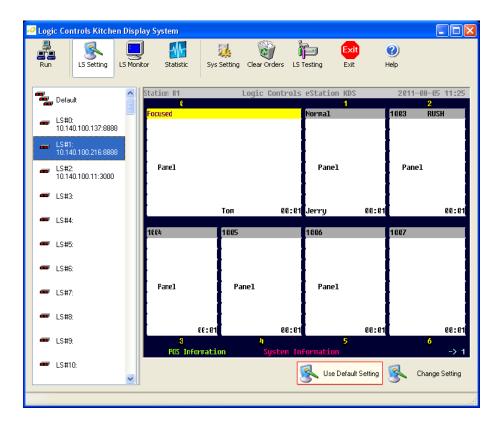
E.G.: For Item 11111 below, click new for summary translation, just click OK after new windows pop-up.



Setting KDS individual station attributes

The "default" attributes can be applied to any stations.

Select a station on the list view (left) and click on the button <Use Default Setting>. This will change all the settings back to its default values.



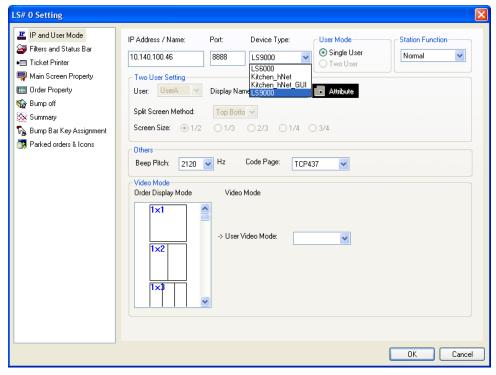
<<IP and User Mode>>

Set IP address and port number

Click "LS Setting" button. On left LS# panel, each LS# represents one LS6000 eStation station in the kitchen. Double-click LS#0, or LS#1...to open "LS# setting" window. On the pop-up "LS# setting" window, enter the IP address and port number of LS6000s. In Device Type drop-down list, select "LS6000".

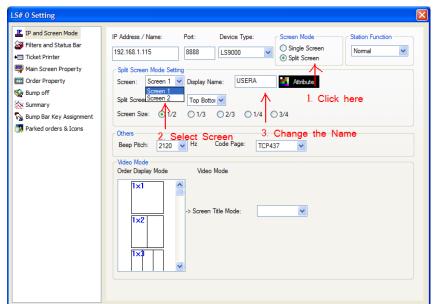
If users use a LC8200/LC7000 as kitchen a station, users should select "Kitchen_hNet" from Device Type drop-down list.

If users use a LS9000 as kitchen a station, users should select "LS9000" from Device Type drop-down list.



Users can also select desired Beep Pitch and Code Page in this window. Different Code Page includes different characters. (http://en.wikipedia.org/wiki/Code_page)

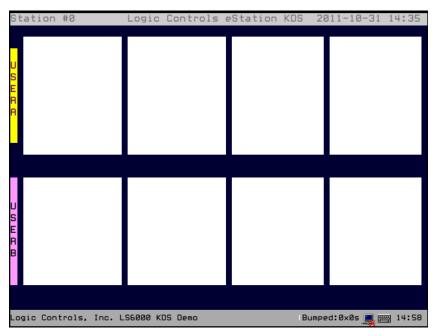
Screen mode



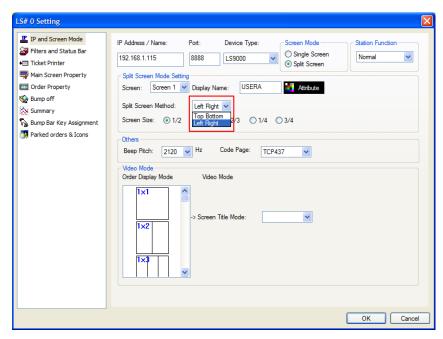
This feature enables users to see the screen split in two separated order panels.

Note: Once "Top Bottom" is chosen, the penal numbers should be set as **1x4** in Main Screen Property in order to get the screen display below. For panel settings, Please refer to **<<Main Screen Property>>.**

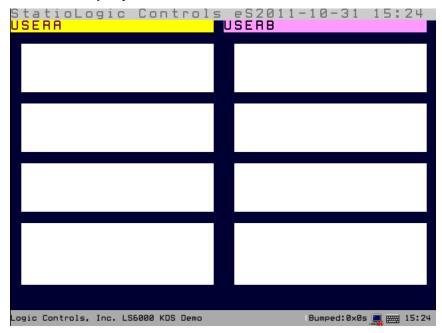
OK Cancel



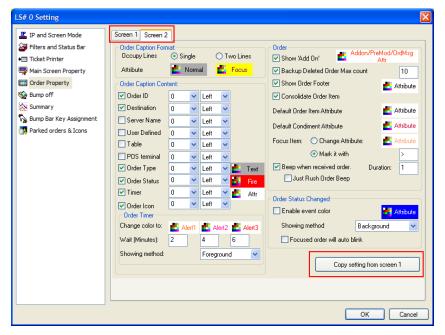
The user can choose two different split methods: Top Bottom and Left Right.



Note: Once "Left Right" is chosen, the penal numbers should be set as **4x1** in Main Screen Property in order to get the screen display below. For panel settings, Please refer to **<<Main Screen Property>>.**



Since there are two screens at the same station, user is able to set up each screen in this mode for other aspects such as Main Screen Property, Order Property, Bump off and Summary. For instance, user can switch between screen 1 and screen 2 under Order Property.



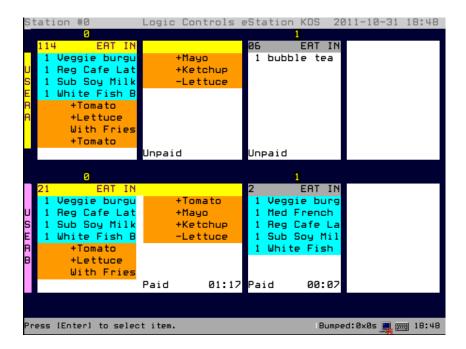
Users can also copy all the settings from one screen to the other one.

Assigning a KDS Station/Screen tag in the order XML file, users can rearrange the orders on different screens.

Order Status Sample:

```
(Append tag "<KDSStation>:0 </KDSStation>" to each item in the orders with tag "<OrderStatus>0 </OrderStatus>", 0 is unpaid, :0 is screen 1)
```

(Append tag "<KDSStation>:1</KDSStation>" to **each item** in the order with tag "<OrderStatus>1</OrderStatus>", 1 is paid, :1 is screen 2)

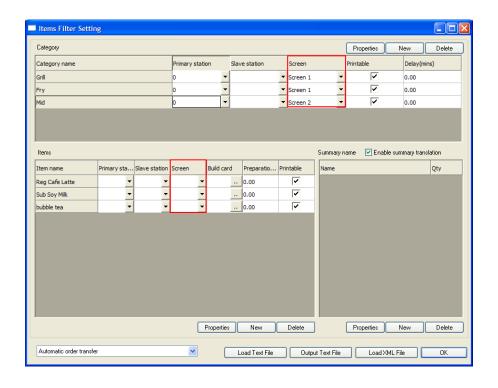


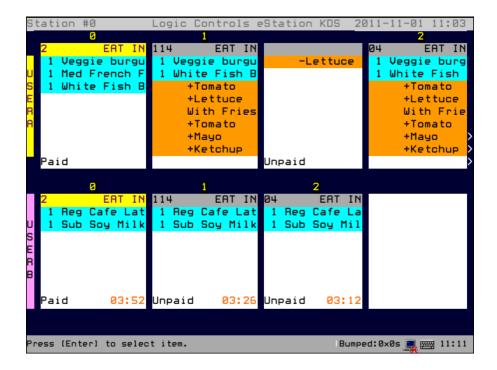
Therefore, the unpaid orders are on the top and the paid orders are on the bottom.

Note: In addition, using the xml tag **<KDSStation>2:0</KDSStation>** would send the item to screen 1 of station 2. Since this tag is on the item level, users have to add the tags to each item in the order.

Screen Mode in Item Filter Setting

Users can choose screen 1 or screen 2 in Item Filter Setting based on categories or items.





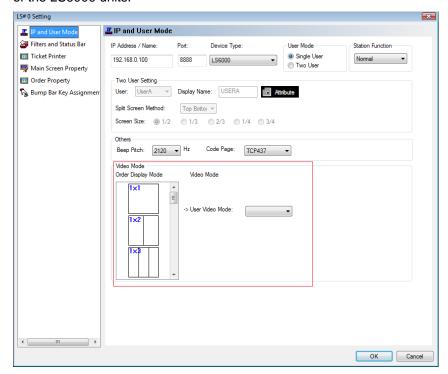
Screen Mode setting in LS# Setting

Select Order Display Mode first from the list, and then select User Video Mode from the right drop-down list box. For example, if 2*4 panels order display mode is used, then the 80*25 video mode will be suitable; if 2*3 panels order display mode is used, then 60*25 video mode will be more suitable.

The maximum Display Mode is 4x8 panels (4 rows and 8 columns).

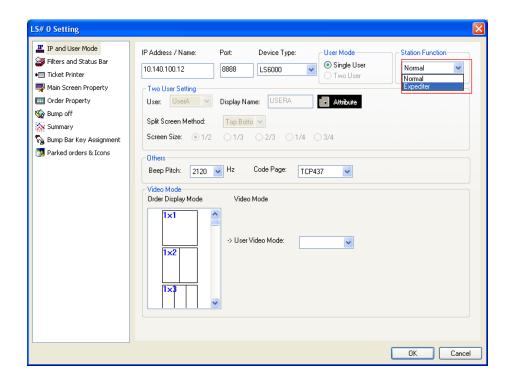
Available video modes:

40x25, 64x25, 80x25, 106x31, 129x41 (for LS9000 only), 169x51 (for LS9000 only). Users can also select a different code page, according to usersr POS and regionalization requirements. Unicode is supported for all LS9000 controllers and some special versions of the LS6000 units.

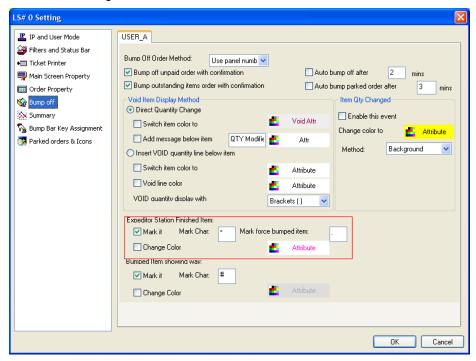


Expeditor

If one station is set as Expeditor, **all orders** will be automatically sent to this Expeditor station. Thus, at this station, the operator is able to quick visualize all orders currently being processed at the kitchen and the staff at the front counter can handle different items from different preparation stations.

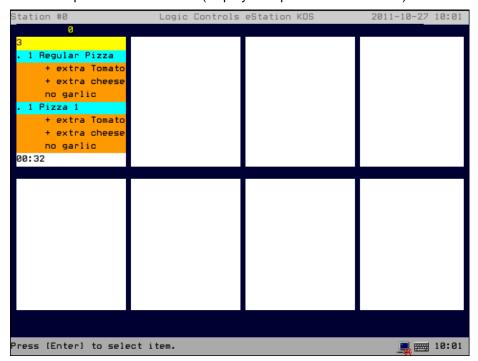


In addition, if any item/order is bumped off from a normal station, that item/order will be marked in the Expeditor station. So waiters can check status of the orders on the fly. This behavior is configured on the "Bum Off" Tab, on the section shown below.

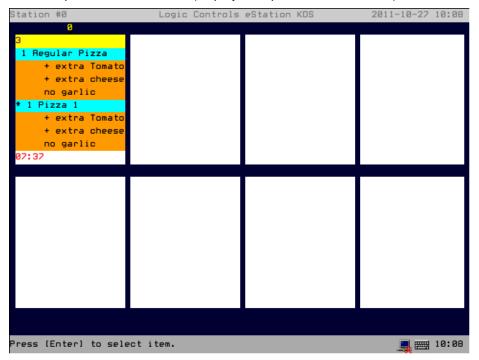


If the order below is bumped at the normal station, the items in this order is marked with "." at the expeditor station. If the item is bumped at the normal station, that specific item will be marked with "*"

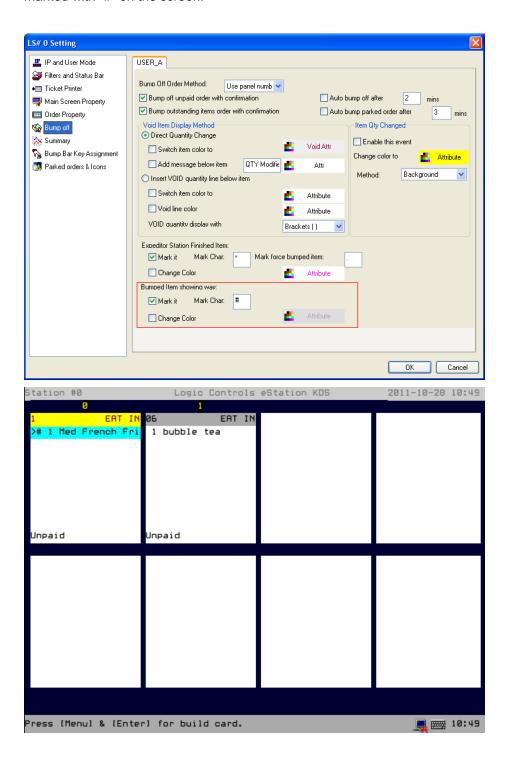
Order bumped at normal station (display at expeditor station below):



Item bumped at normal station (display at expeditor station below):

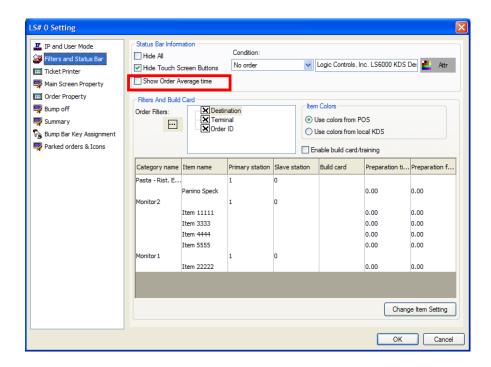


If the item is bumped at the normal station / expediter station, the item in this order is marked with "#" on the screen.



<< Filter and Status Bar>>

Show Order Average Bump-off Time



By checking this checkbox, KDS will displayed total number of orders processed and average time to process an order info (e.g. "Bumped: 3 x 30s", 3 indicates total 3 orders, 30s indicates average each order take 30 seconds to finish) on right side of status bar of station's screen.

Note: it is an individual station setting

Users can use <Clear Orders> button on the top toolbar to clear-up/initialize average bump-off time records ("Bumped: 0 x 0s")



Please note this statistic bump-off time info is based on daily. It means it only calculate the orders, which are bumped today. If an order is received yesterday, but bumped today, it's still considered as today.

<<Ticket Printer>>

Set up ticket Printing

Ticket Printer function let users print the orders via serial ports of LS6000. Please follow the steps below to set up ticket printing.

Connect the printer to serial port of LS6000 (If COM2 is used, a RJ-45 to DB-9 serial cable is necessary).

Power on LS6000 and press "Down Arrow" key (Legend Option-A bump bar) in order to enter "LS6000 Parameter Setup Screen".

In "LS6000 Parameter Setup Screen", go to "SERIAL" tab and find out the Baud Rate of whatever COM port users printer connected. Please set the same Baud Rate as users printer uses or adjust users printer's Baud Rate as LS6000's.

Save the change and exit ""LS6000 Parameter Setup Screen".

Open KDS_Manager.

In Ticket Printer panel of KDS Manager, select the COM port.

In Ticket Printer panel of KDS Manager, select the printer brand from drop-down combo box (Either Epson, Citizen, Bematech, or Custom) and enter the commands below for the selected printer.

Please note:

- 3.1. Not all commands are applicable to the selected printer.
- 3.2. For entering the printer commands, if the command has multi-byte, please separate each byte by comma.

For instance,

For the Citizen printer, its paper cut code is "1D5630". Therefore, I should enter "1D, 56, 30" in the paper cut field of "Ticket Printer" setting window and include <pc> in the template.

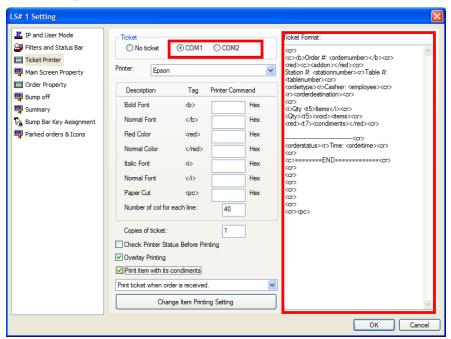
In Ticket Printer panel of KDS Manager, check options according to the requirement, such as "Number of col for each line" "Overlap Printing", "Simulate by overlap printing" → Overlap Printing is mostly used on dot matrix printers which do not have bold commands thus the KDS can emphasize boldness by printing twice on the same line/position.

Users may choose either "Print ticket when order is received." Or "Print ticket when order is bumped." from drop-down list.

All tags ticket printer supports.

Group	Tag	Description
Align	<c></c>	Align center
	<r></r>	Align right
Font		Bold font start and end
	<i></i>	Italic font start and end
Color	<red></red>	Red color text start and end
Position	<cr></cr>	Carriage return
	<t#></t#>	#: is a number, add # tab
	<pc></pc>	paper cut
Order Info	<ordernumber></ordernumber>	Order number
	<stationnumber></stationnumber>	Station number
	<orderstatus></orderstatus>	Order status
	<ordertime></ordertime>	Order time 24-hour format
	<ordertime12h></ordertime12h>	Order time 12-hour format (AM/PM)
	<tablenumber></tablenumber>	Table number
	<ordertype></ordertype>	Order Type
	<employee></employee>	Employee
	<orderdestination></orderdestination>	Order destination
	<addon></addon>	add on string
	<qty></qty>	Quantity
	<void></void>	void string
	<items></items>	All items
	<condiments></condiments>	All condiments

Enter a template,



Template sample as bellow:

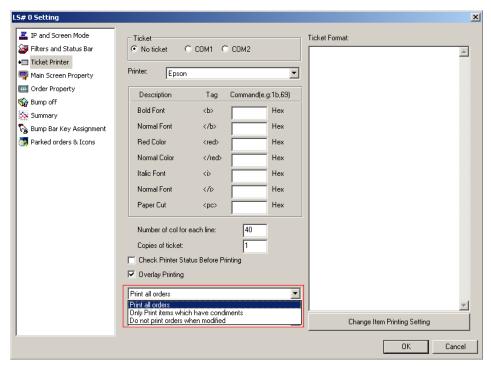
```
<cr>
<c><b>Order #: <ordernumber></b><cr>
<red><c><addon></red><cr>
Station #: <stationnumber><r>Table #: <tablenumber><cr>
<ordertype><r>Cashier: <employee><cr>
<r><orderdestination><cr>
<cr>
<i>Qty <t5>Items</i><cr>
<Qty><t5><void><items><cr>
<red><t7><condiments></red><cr>
-----<cr>
<orderstatus><r>Time: <ordertime><cr>
<cr>
<c>=====END======<cr>
<cr>
<cr>
<cr>
<cr>
<cr>
<cr>
<cr><pc>
```

Change Items Printing Setting

Have all orders to print by the KDS Manager, choose "Print all orders". The KDS manager will print all orders include modified one. That means if you make any change to the order, KDS will print the new order receipt.

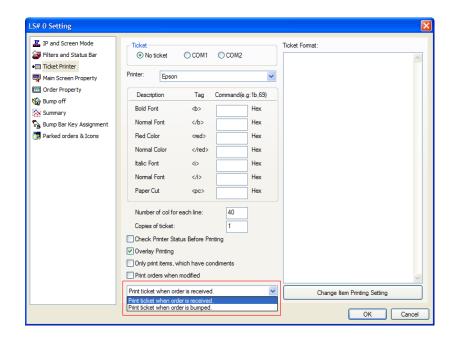
If you don't want the KDS Manager to print modified order, simply select "Do not print orders when modified", so KDS Manager will only print the order once.

Have KDS Manager to print those orders with condiments, choose "Only print items which have condiments".

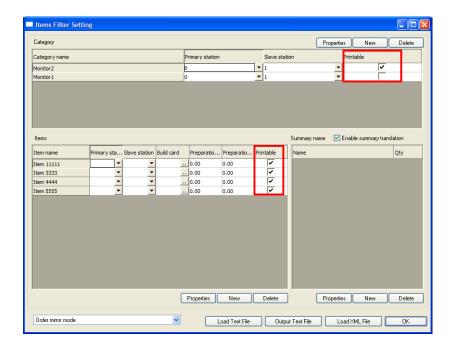


To have the ticket printed when orders are received by the KDS Manager, choose "Print ticket when order is received"

To have the ticket printed only when the order is bumped off, choose "Print ticket when order is bumped"



Users can also specify the categories and/or items that they don't want to print out by unchecking the "Printable" checkbox shown in the "Items fiter Settings" dialog box, below:.

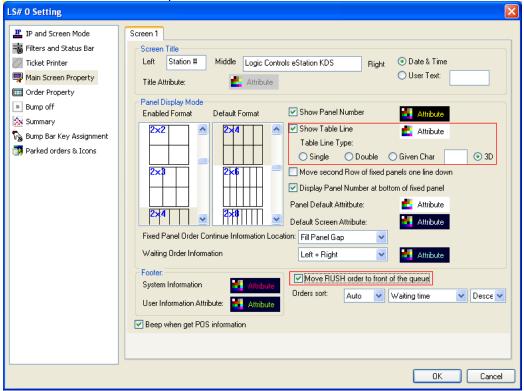


<< Main Screen Property>>

3D panel view:

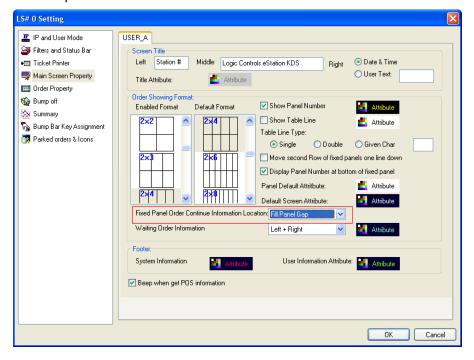
- Enable "3D" panel view in "Main Screen Property" setting
- Check both "Show Table Line" and "3D" check box in "Panel Display Mode"

Move rush order to front of queue:

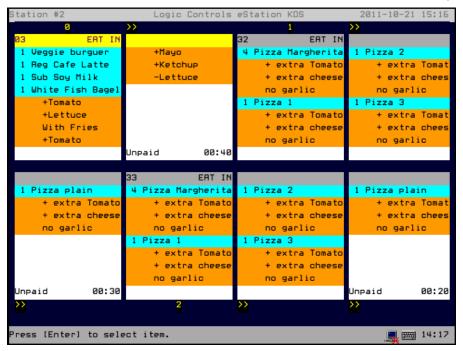


Fixed Panel Order Continue Information Location

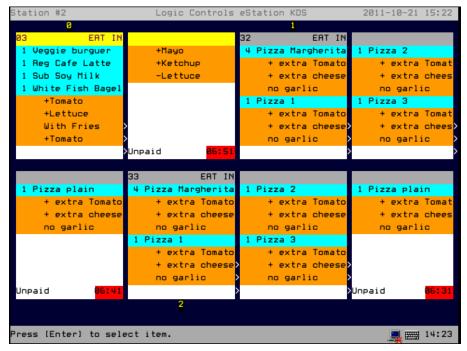
This option allows users to change the presentation of the orders that continue on different panels:



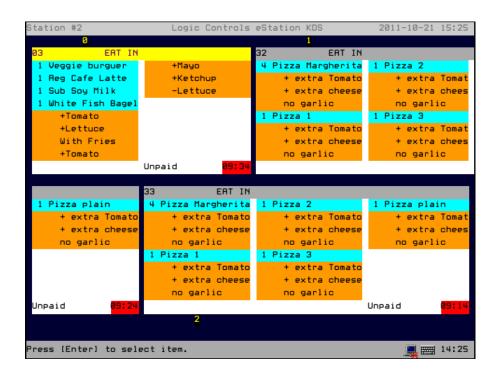
"Arrow next to Paine Number" \rightarrow is added on the header/footer of the panel.



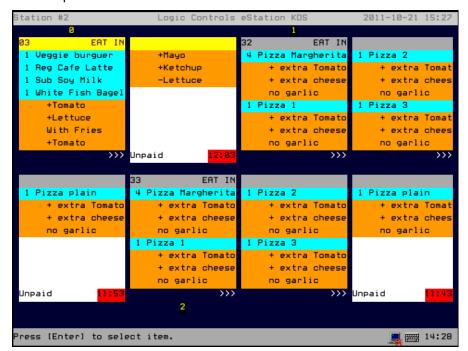
"Right Arrow" → " are added on the empty gap between panels.



"Fill Panel Gap" → Adjacent panels are merged for the same order. This is the default behavior.



"Panel Footer" → "
"is added to the footer, indicating that the order continues in the next panel.

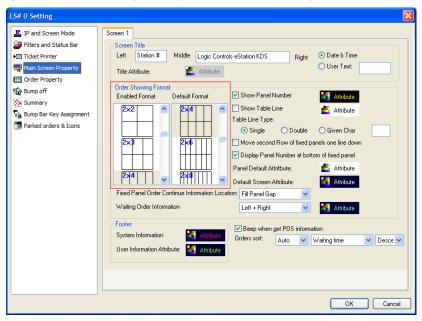


Change # Panels/Screen

In the Enabled Format list, click any formats users want to add. When KDS Manager is running, users may use Space key on the bump bar to switch Order Showing Format

among Enabled Formats. Only one Default Format can be selected and displayed on the screen.

The maximum is 4x8 panels (4 rows and 8 columns).

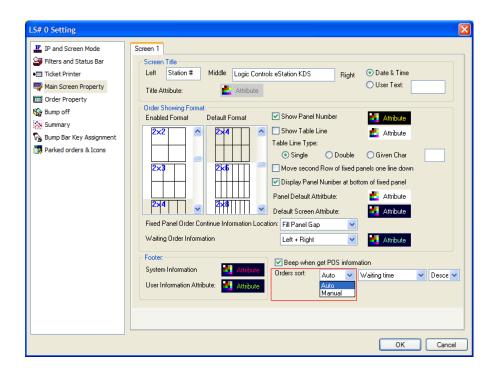


Orders Sort

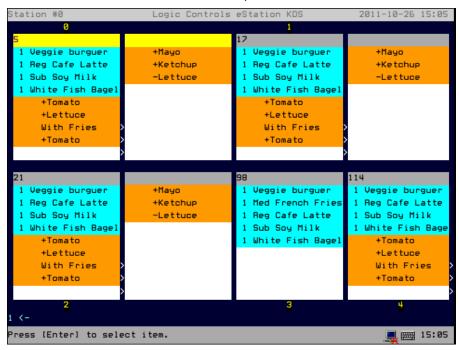
Orders sort provides two methods of sorting order, Auto and Manual.

If "Manual" is chosen: users able to move any order they want to the front, to do this: Enable "Sort Order by" key in "Bump Bar Key Assignment" setting, press the sort order key, and choose where you want to place the orders.

If "auto" is chosen, the KDS Manager will sort orders on the controller screen automatically, based on the criteria selected. If "manual" is chosen, users have to assign a bump bar key to "Sort orders by" in Bump Bar Key Assignment. (Refer to <<Bump Bar Key Assignment>> to sort the order at the kitchen station, using the bump bar).

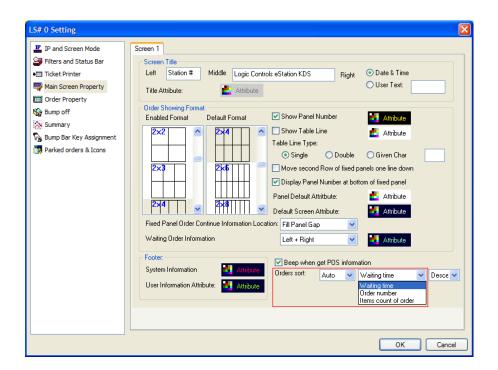


Order sort: Order Number ascends Sample:

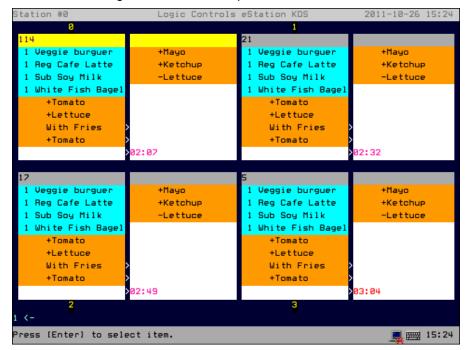


There are three criteria for sorting an order:

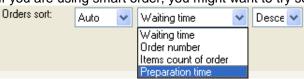
Waiting time; Order number and Items count of order



Order sort: Waiting time ascends Sample:



If you are using smart order, you might want to try sorting base on preparation time:



LS# 0 Setting ■ IP and Screen Mode Screen 1 Filters and Status Bar Screen Title Right ODate & Time ◆ Ticket Printer Left Station # Middle Logic Controls eStation KDS User Text: Main Screen Property Title Attribute: Attribute Order Property Order Showing Format: Sump off Show Panel Number Enabled Format Default Format x Summary Show Table Line Attribute Bump Bar Key Assignment Table Line Type: Parked orders & Icons Single ○ Double ○ Given Char Move second Row of fixed panels one line down ☑ Display Panel Number at bottom of fixed panel Panel Default Attritbute: 2×8 Default Screen Attribute: Attribute Fixed Panel Order Continue Information Location: Fill Panel Gap Waiting Order Information Left + Right Attribute Footer Attribute | Orders sort | Auto | Waiting time ☑ Beep when get POS information ✓ Desce ✓ User Information Attribute: Attribute Ascending Descendir

OK

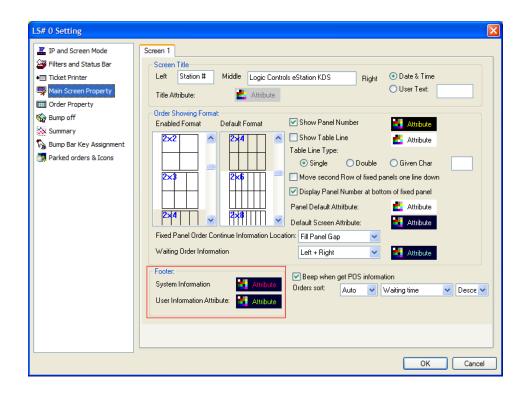
Cancel

Users can also descend or ascend three conditions above.

Note: KDS Manager does the sort on orders ID alphabetically.

Footer Attribute

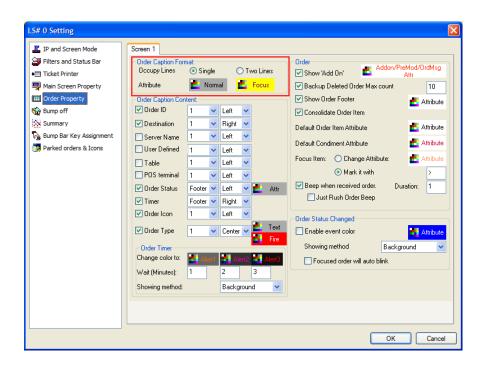
The FG and BG colors of the System Information and User Information



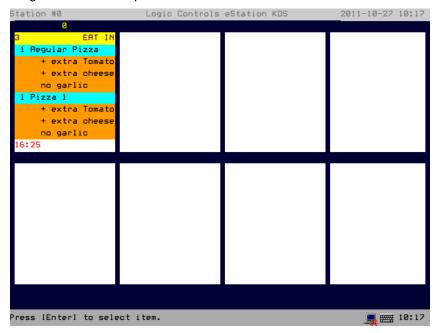
<<Order Property>>

Order Caption (Header) Format

Order Caption (the order information) can be set to occupy either single or two lines. In other words, users can display one caption content or two caption contents in parallel. And also, they can change the focus and normal caption's attributes.

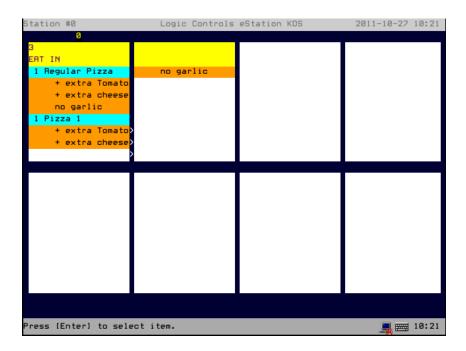


Single Line Order Caption Format:



Note: In order to have two caption lines displayed, users have to choose two lines for the "Occupy Lines", set order ID as "1" and destination as "2"

Two lines Order Caption Format:

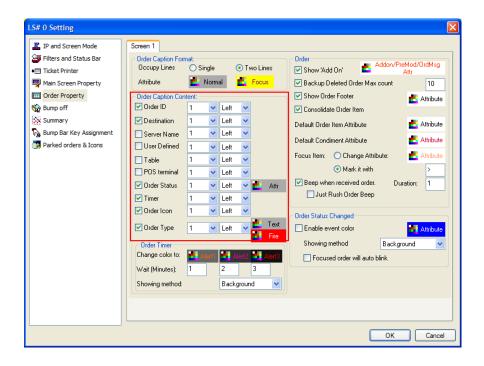


Order Caption Content in Order Property

In Order Caption frame, users can change the position of the different captions (text messages) displayed on the controller screen, such as Order ID, Destination, Order Type, Order Status, and Timer.

The position of these captions could be **left, center** or **right**, on the first line (choose 1), on the second line (choose 2) or under the orders (choose footer).

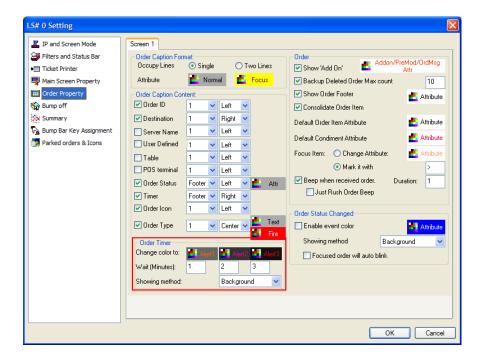
Note: Do not put two captions in the same position. Otherwise only one caption will be shown.



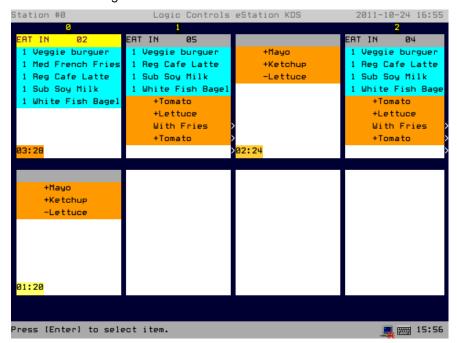
Order Timer

If Timer is enabled in "Order Caption Content" group box in the right position, users can set up 3 alter levels and use 4 showing methods (Background, Foreground, BG&FG, and Blinking) to represent different alter levels.

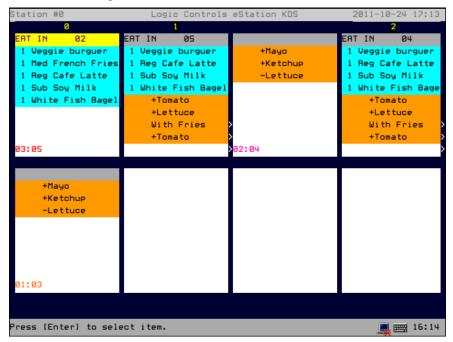
Please note "Order Icon" and "Timer" CANNOT be in the same caption line.



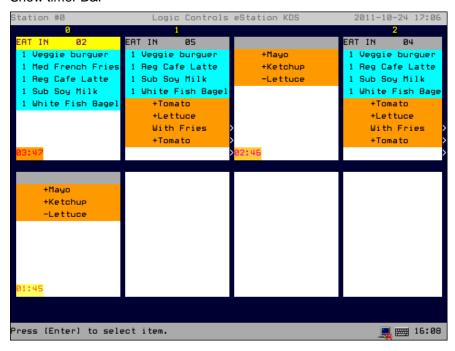
Show timer Background



Show timer Foreground

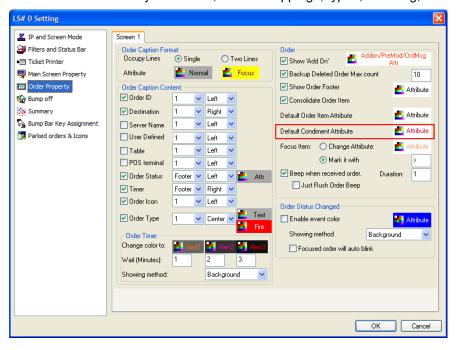


Show timer B&F



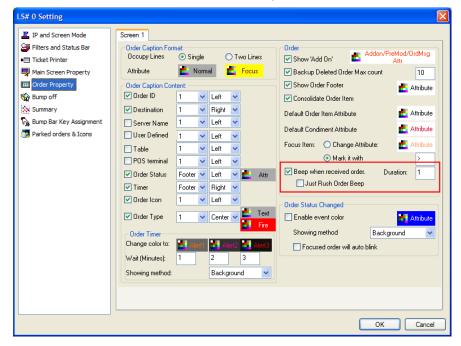
Set up Default Condiment Attribute in Order Properties

Condiments include any sub-items, such as toppings, types, dressing, modifiers, and etc.



Beep when received order

Users can change beep duration as well. The duration value can be from 1 to 15. Note: If users choose "Just Rush Order Beep", both boxes must be checked.



Show 'Add On'

different.

Add on means if users add something to the same order ID after a period of time, the mark Add On will be shown. The timer for Add On to appear is 60 seconds. If users add something to the same order ID within 60 seconds, the Add On will not be shown.

Note: The order ID on the xml file could be the same, but the items IDs should be

Backup Deleted Order Max count

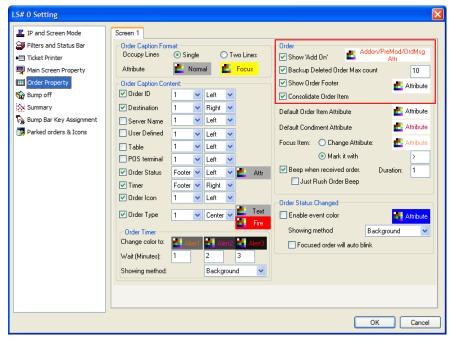
This is the maximum number of the bumped orders users can restore. For instance, if users put a number 10 here and bump 11 orders, users cannot restore the first order that was bumped since the maximum number of the bumped orders users can restore is 10. KDS always restore the orders from the last order bumped to the first one.

Show Order footer

If this option is selected, the orders will show the footer information which users can customize in "Order Caption Content".

Consolidate Order Item

If this option is selected, the same items (with different item ID) within the same order will be merged.



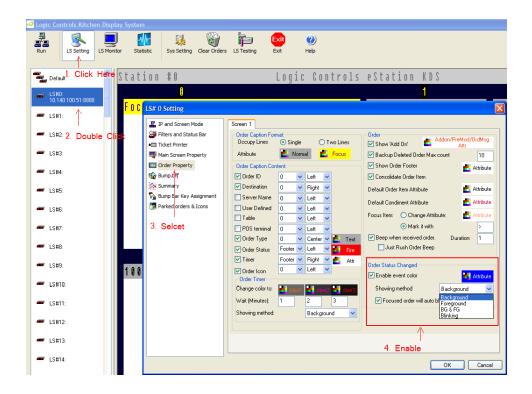
Users can change Add on / Pre-Modifier /Order color attribute by selecting the color from "Addon/PreMod/OrderMsg Attr".

"Order Status Changed" event

An order status can be changed among 3 order statuses (unpaid, in process, paid) by sending an order XML with new status tag to KDS as below. If an order status is changed, the KDS can highlight the revised order by changing its Background, Foreground, FG&BG, or Blinking of the header of an order.

XML order file:

```
......
<Order>
......
<OrderStatus>3</OrderStatus>
<!-- 0 unpaid -->
<!-- 1 Paid -->
<!-- 2 In Process -->
......
</Order>
.....
```



Order Status Change BG&FG Sample:

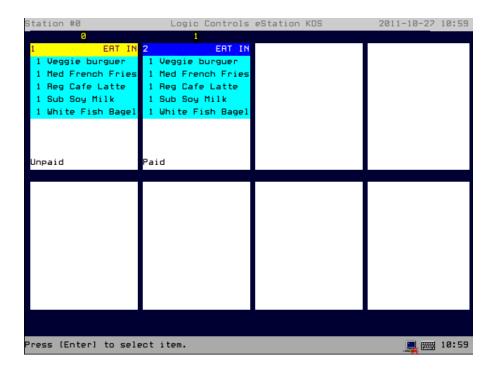
Send an XML order file to KDS:

```
<Transaction>
<Order>
<ID>2</ID>
<PosTerminal>1</PosTerminal>
<TransType>1</TransType>
<OrderStatus>0</OrderStatus>
<OrderType />
<ServerName>Annie</ServerName>
<Destination>EAT IN/Destination>
<GuestTable />
<UserInfo />
<IconIndex>0</IconIndex>
<Item>
<ID>1</ID>
<TransType>1</TransType>
<Name>Veggie burguer</Name>
<Category>Grill</Category>
```

```
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
<Item>
<ID>2</ID>
<TransType>1</TransType>
<Name>Med French Fries</Name>
<Category>Fry</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
<Item>
<ID>3</ID>
<TransType>1</TransType>
<Name>Reg Cafe Latte</Name>
<Category>Mid</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
<Item>
<ID>4</ID>
<TransType>1</TransType>
<Name>Sub Soy Milk</Name>
<Category>Mid</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
<Item>
<ID>5</ID>
<TransType>1</TransType>
<Name>White Fish Bagel</Name>
<Category>Grill</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
</Order>
</Transaction>
```

Send an Order Status Change XML file to KDS:

```
<Transaction>
<Order>
<ID>2</ID>
<TransType>3</TransType> <OrderStatus>1</OrderStatus>
</Order>
</Transaction>
```



Note: See following table, the focus attribute has higher priority than event attribute. The order status changed event only applies to the **normal orders**. If users want to apply this feature to the focused order, check "Focused order will auto blink".

Event_Color_Showing Method	Normal order	Focused order
BG	Event attribute BG	Focused attribute
FG	Event attribute FG	Focused attribute
BG&FG	Event attribute BG&FG Focused attribute	
Blinking	Blinking	Focused attribute

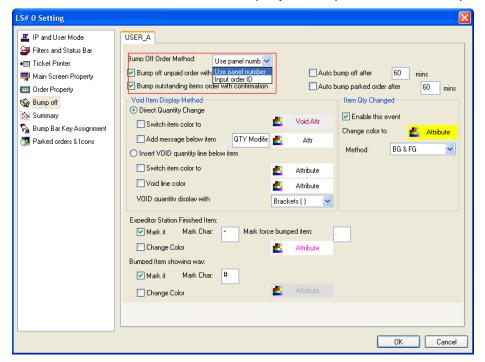
<<Bump Off>>

Bump Off Order Method

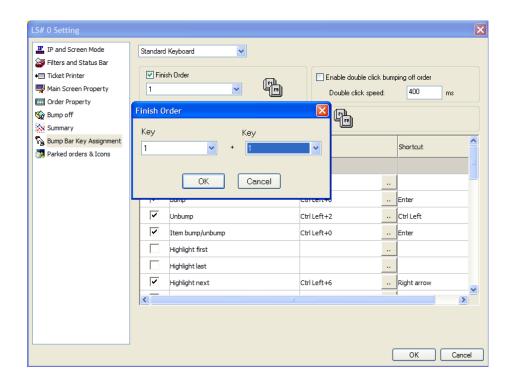
If users choose bumping off orders either by panel number or by order id, follow the steps as below:

Bump off by panel number directly (The order will not be highlined)

Select "Use Panel Number" in "Order Property"->"Bump off order method" option.



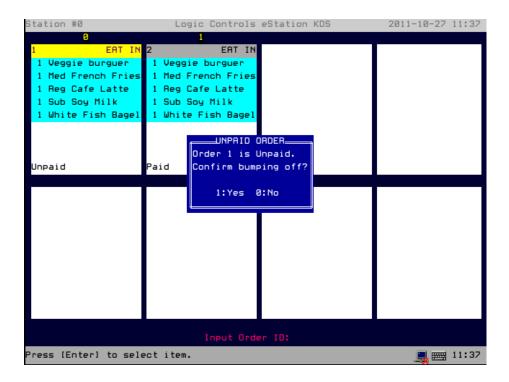
Check "Finish Order" check box in "Bump Bar Key Assignment", and check 2-button icon underneath to assign 0-0, 1-1,..... For example, it represents using key 0 to bump off panel 0, using 1 to bump off panel 1, and so on.



Bump off by Order ID

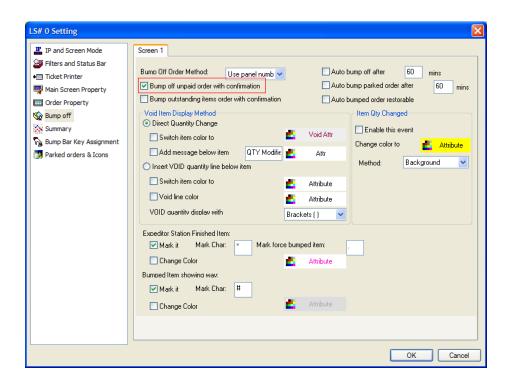
Select "Input Order ID" in "Order Property"->"Bump off order method" option.

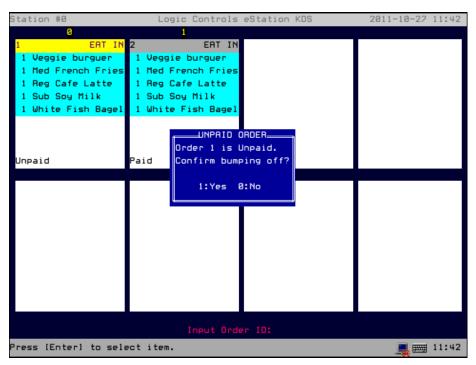
User has to enter the order id, using the bump bar, and press <ENTER>. The selected order will be highlighted, then press the <ENTER> key again to bump off the order.

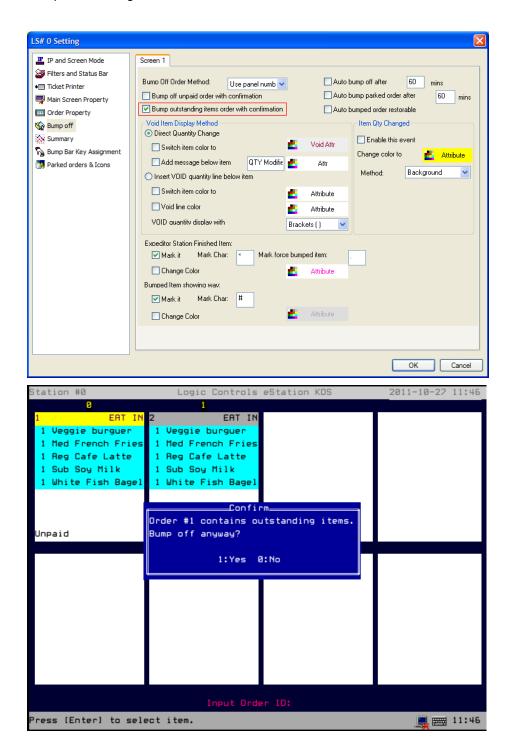


Bump off unpaid order with confirmation

This option allows users to enable/disable confirmation for the bumping orders on the screen.







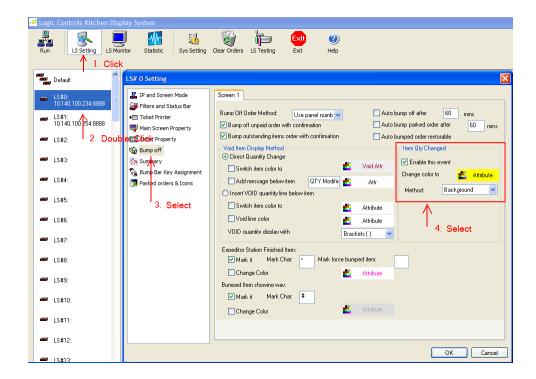
Note: If both confirmation methods are checked, the default is unpaid confirmation.

"Item Quantity Changed" event

If an item's quantity is changed by sending an order xml file with new quantity tag to KDS as below, KDS can highlight the revised order by changing its Background, Foreground, FG&BG, or Blinking of that item.

XML order file:

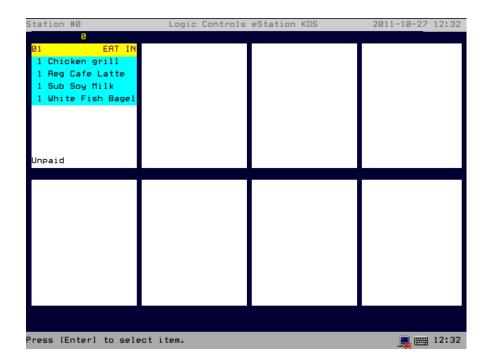
```
.....
<Item>
<ID>0</ID>
.....
<TransType>3</TransType>
<!-- 3 - Modify this item-->
.....
<Quantity>1</Quantity>
.....
</Item>
```



Send an order XML file to KDS:

```
<Transaction>
<Order>
<ID>01</ID>
<PosTerminal>1</PosTerminal> <TransType>1</TransType>
<OrderStatus>0</OrderStatus>
<OrderType>RUSH</OrderType>
<ServerName>Annie</ServerName>
<Destination>EAT IN/Destination>
<GuestTable />
<UserInfo />
<IconIndex>1</IconIndex>
<Item>
<ID>2</ID>
<TransType>1</TransType>
<Name>Chicken grill</Name>
<Category>Grill</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
<Item>
<ID>4</ID>
<TransType>1</TransType>
<Name>Reg Cafe Latte</Name>
<Category>Mid</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
<Item>
<ID>5</ID>
<TransType>1</TransType>
<Name>Sub Soy Milk</Name>
<Category>Mid</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
<Item>
<ID>6</ID>
<TransType>1</TransType>
<Name>White Fish Bagel</Name>
```

```
<Category>Grill</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
</Order>
</Transaction>
```

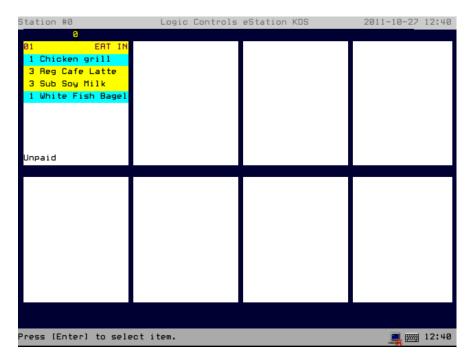


Send a Qty change XML file to the KDS:

```
<Transaction>
<Order>
<ID>01</ID>
<PosTerminal>1</PosTerminal>
<TransType>3</TransType>
<Item>
<ID>5</ID>
<TransType>3</TransType>
<Quantity>3</TransType>
<Quantity>3</Quantity>
<Item>
<ID>4</ID>
<TransType>3</TransType>
<Quantity>3</Quantity>
</Item>
<Item>
<ID>4</ID>
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```





Void Item Display Method

When users void an item (delete the item); the voided item can be display in two methods, either "Direct Quantity Change" or "Insert VOID quantity line below item".

Default is "Direct Quantity Change"

Select "Direct Quantity Change", check "Switch item color to" and "Add message below item" to enable the options. Send a sample order XML file to KDS.

```
<Transaction>
<Order>
<ID>01</ID>
<PosTerminal>1</PosTerminal> <TransType>1</TransType>
<OrderStatus>0</OrderStatus>
<OrderType>RUSH</OrderType>
<ServerName>Annie</ServerName>
<Destination>EAT IN</Destination>
<GuestTable />
<UserInfo />
<IconIndex>1</IconIndex>
<Item>
```

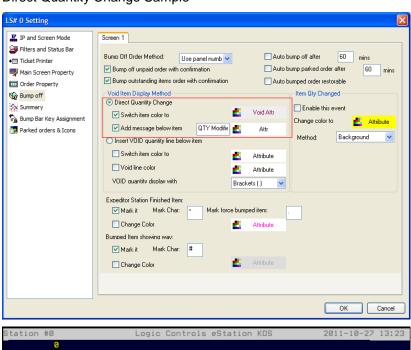
```
<ID>2</ID>
<TransType>1</TransType>
<Name>Chicken grill</Name>
<Category>Grill</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
<Item>
<ID>4</ID>
<TransType>1</TransType>
<Name>Reg Cafe Latte</Name>
<Category>Mid</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
<Item>
<ID>5</ID>
<TransType>1</TransType>
<Name>Sub Soy Milk</Name>
<Category>Mid</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
<Item>
<ID>6</ID>
<TransType>1</TransType>
<Name>White Fish Bagel</Name>
<Category>Grill</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
</Item>
</Order>
</Transaction>
```

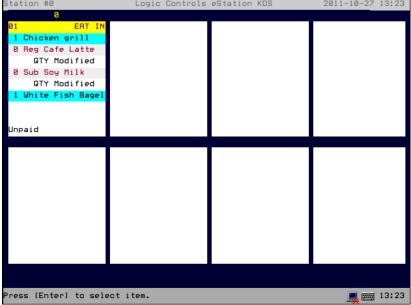
Send an item void XML file to KDS

```
<Transaction>
<Order>
<ID>01</ID>
<PosTerminal>1</PosTerminal>
<TransType>3</TransType>
<Item>
```

```
<ID>5</ID>
<TransType>2</TransType>
</Item>
<Item>
<ID>4</ID>
<TransType>2</TransType>
</Item>
</Order>
</Transaction>
```

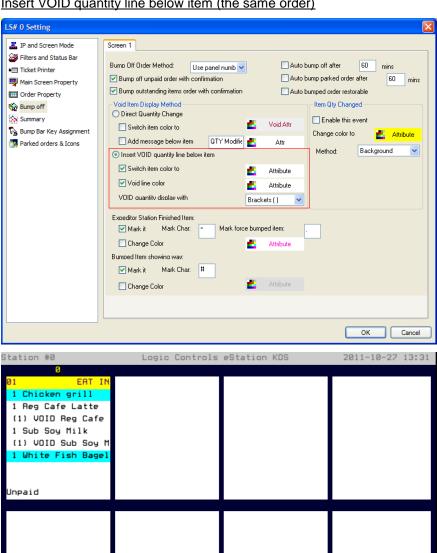
Direct Quantity Change Sample





Insert VOID quantity line below item (the same order)

Press [Enter] to select item.



13:31

Auto Bump Off

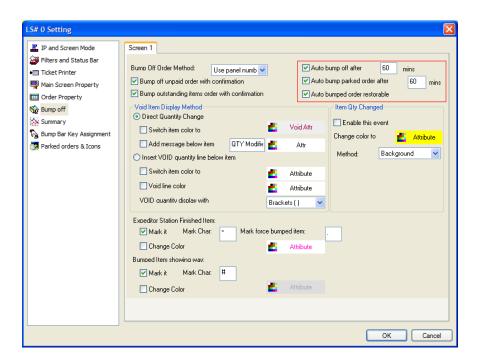
If these options are used an order can be bumped off automatically after a specified amount of time has elapsed. This is useful for those cases where the chef works on the order, finished them up, but forget to bump them off.

There are three options for this auto bump feature:

Auto bump off after -> used for regular orders displayed on the screen

Auto bump parked after -> applies a timeout for orders on the parking list

Auto bumped order restorable -> by default, orders that are auto bumped cannot be restored. Check this option to allow them to be restorable as well.

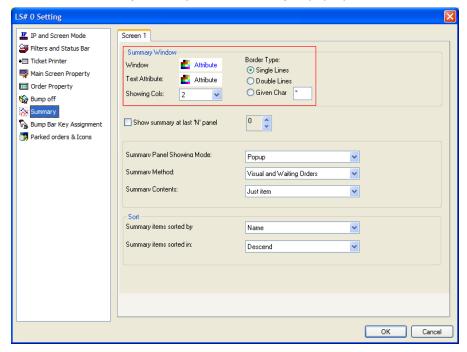


<<Summary>>

Summary Window

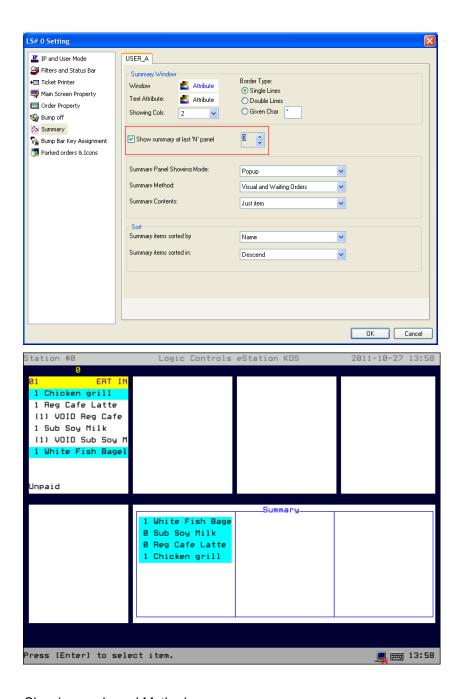
Users can configure basic settings of the summary window such as "Attribute", "Border type".

Note: The default key on bumpbar for summary to pop-up is LeftCtrl + 5



Show summary at last "N" panel

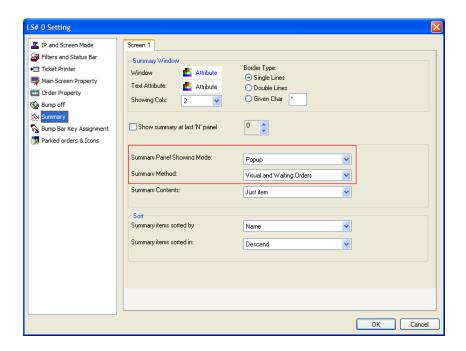
Users can use last "N" panel to show Summary screen. For example, if users enter 3, this indicates the last 3 panels will be used to display Summary screen. The summary will keep updating according to arrived new orders.



Showing mode and Method

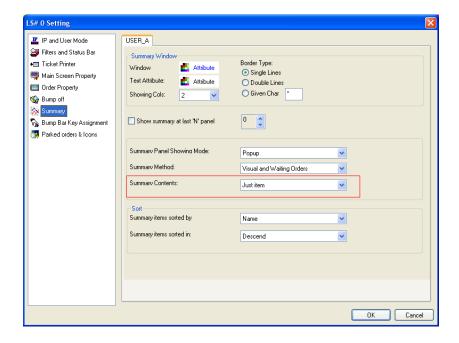
There are two showing modes for summary: Popup and Full Screen.

There are also two showing methods: "Visual and Waiting orders" and "Just Visual orders". Default, is "Visual and Waiting orders", where all items processed by KDS Manager will be shown in the Summary; even those that are in different pages. If you select "Just Visual Orders" only those item currently being displayed on the screen will be summarized.



Summary Contents

User can choose to display Summary content by grouping "Just Item" (Same items but with different condiments will be consolidated together), this is the default behavior, or "Item with condiments" (Same items but with different condiments won't be consolidated) from Summary Content drop-down list.

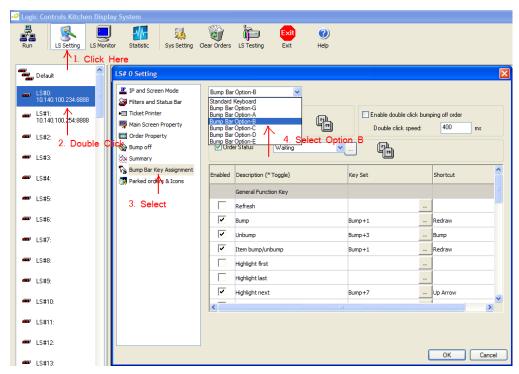


Summary Sorting options

User can select to sort the items shown in the Summary either by their description (Name) or by their quantities. Ascending/Descending options are available.

<< Bump Bar Key Assignment>>

Select the proper keyboard style from keyboard drop-down list, and then define up to 2 key sets for each desired function. The default bump bar option for any station is "Option A". If users want to change the bump bar layout, follow the steps below:



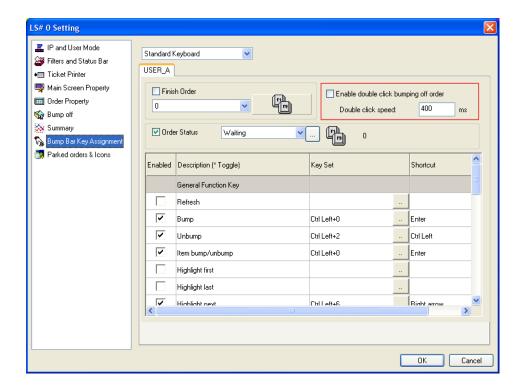
Click "..." button next to Redraw and choose "Bump" from pop up "Bump" window (Bump+Null). Moreover, you should change ALL Shortcuts of function keys to match proper keys. If combination keys to call a specific function are NOT desired, you need to use NULL to one of the Key Set.

Adjusting Double-click Speed to Bump Off (LS6000 ONLY)

Power-on LS6000/LS9000 and press & hold Down Arrow Key / DEL Key

In Setup Screen, go to "SERIAL"=>"COMX"=>"Device Driver" and change it to "Elo-Touch", go to "Exit"=>"Exit and Save".

Open KDS Manager, in "LS# Setting" => "Bumpbar Key Assignment" node, and then find and check "Enable double click bumping off order" checkbox and enter users desired interval of double-click speed on the textbox. The unit is millisecond.



<< Parked orders & Icons>>

Display Icon in an Order

In "Parked orders & Icons" page, **double-click** a line in "Order ICON" table OR highlight a line in "Order ICON" table and click <Edit>button, afterwards "Order Icon Edit" window will pop-up.

Import the 24bit or less color depth BITMAP and JPEG files.

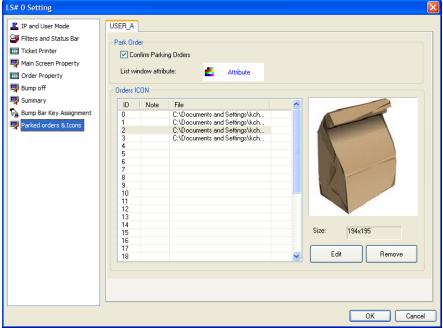
In "Order Property" page, select order icon display location.

Please note "Order Icon" and "Timer" cannot in the same line.

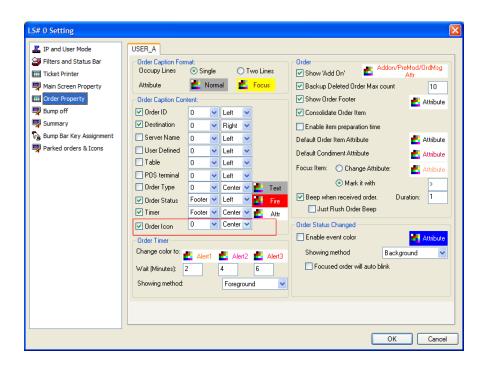
Add <lconIndex>n</lconIndex> tag to order XML files, where "n" is the index of icons in "Order ICON" table.

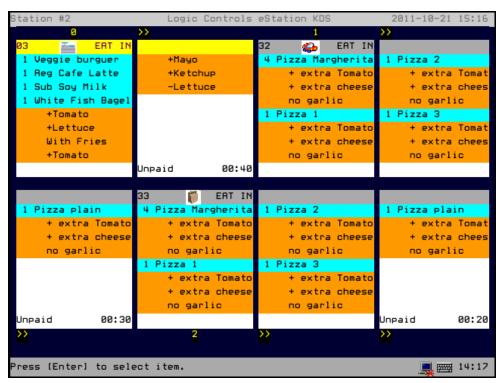
Please refer to "XML Description.txt" in "C:\Program Files\Logic Controls KDS\ForPOSDevelopment" folder for using the <lconIndex> tag inside an order.





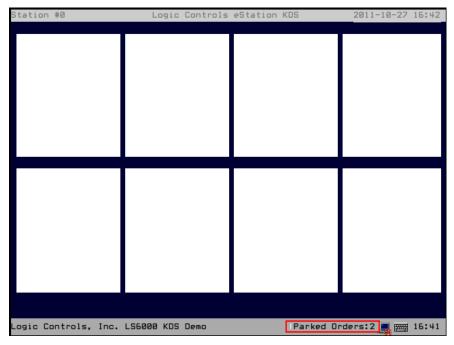
In order for icons to appear on the screen, users have to enable the "Order Icons" in Order Caption Content.





<<Order Parking>>

Once KDS receives a parked order (from the POS), or if the operator parks an order already received, the controller will update the Parked Orders counter, on the bottom of the screen (e.g. "Parked Orders: 2", 2 indicates there are 2 orders in parking pool).



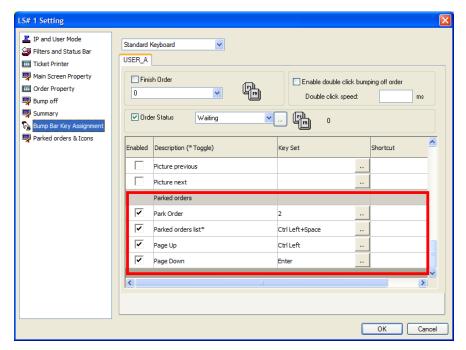
Sending a parked order from the POS

Users can mark an order as parked by using the tag **<Parked>1</Parked>**. Its value can be yes/no or 1/0. A parked order will directly be saved into the parked pool and won't be displayed on station's screen.

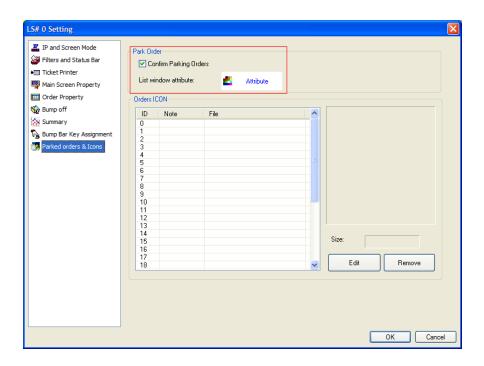
Please refer to "XML Description.txt" in "C:\Program Files\Logic Controls KDS\ForPOSDevelopment" folder for using the <Parked> tag inside an order.

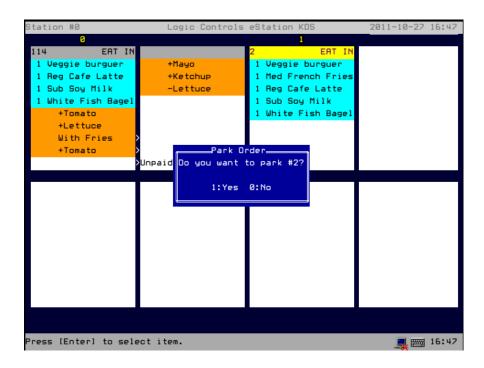
Park an order already received

After moving the focus to the order and pressing the "Park Order" key (default is 2 - defined in "Bump Bar Key Assignment" page), the order will be moved from the display panel to the parking pool.



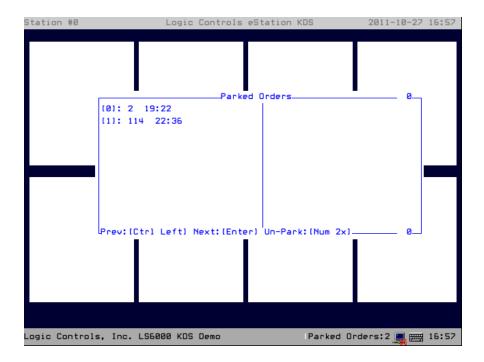
If users check "Confirm Parking Orders" checkbox in "Parked order & Icons" page, KDS will pop-up a confirmation box when parking an order from the bump bar.





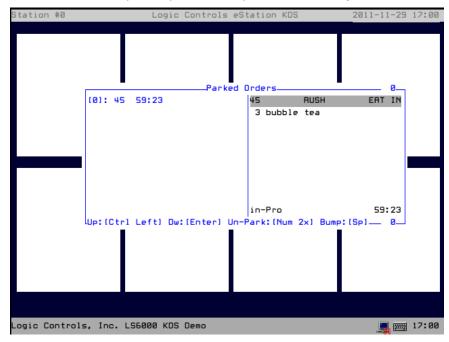
Parked Orders List

Bring out the park orders list window by pressing the "Park Order List" key defined in "Bump Bar Assignment" page. Once the "Parked Orders List" window is shown, you can press the number inside brackets [] to preview the parked order, and press the same number again to un-park it.



Bump the order from Parked Orders List

To bump a specific order, bring up the Parked Orders List window, select the number of the order, and then press space to bump the order directly from the Parked Orders List.



For POS development

After installation, there have three files ("XML Description.txt",

"Send_InfoString_to_Station.txt, and "Sample.xml") and an "OrderStatus" folder in "C:\Program Files\Logic Controls KDS\ForPOSDevelopment".

"XML Description.txt" is an order description. The POS should generate orders comply with this description.

"Sample.xml" is a sample order. It's generated according to "XML Description.txt".

"Send_InfoString_to_Station.txt" is the description about how to send an info string to specified station.

"OrderStatus" folder contains the instruction and samples order files, which are used to request an order status.

For testing, after users setup and run the KDS properly, users will see some panels draw on the screen which connects to LS6000. After that, users copy "Sample.xml" file to

"C:\Program Files\Logic Controls KDS\orderinfo\". The running KDS will automatically read this file and display the order on the screen.

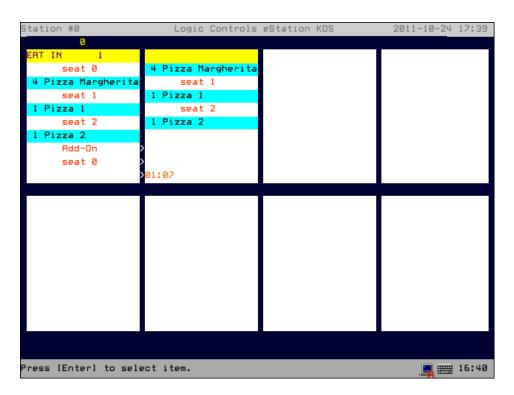
Pre-Modifier(Seat Designation)

Pre-Modifier is one of the parameters in the order XML file, users can use this parameters to assign a seat# or a table# to a specific item. Please check "C:\Program Files\Logic Controls KDS\ForPOSDevelopment\XML Description.txt" for more details.

Seat Designation Sample:

```
<Transaction>
<Order>
<ID>1</ID>
<PosTerminal>1</PosTerminal>
<TransType>1</TransType>
<OrderStatus>0</OrderStatus>
<OrderType />
<ServerName>Annie</ServerName>
<Destination>EAT IN/Destination>
<UserInfo />
<IconIndex>0</IconIndex>
<Item>
<ID>1</ID>
<TransType>1</TransType>
<Name>Pizza Margherita</Name>
<Category>Pizza</Category>
<Quantity>4</Quantity>
<Color BG="180" FG="215" />
<PreModifier>
<Count>1</Count>
<S0>seat 0</S0>
</PreModifier>
</Item>
<Item>
<ID>2</ID>
<TransType>1</TransType>
<Name>Pizza 1</Name>
<Category>Pizza</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
```

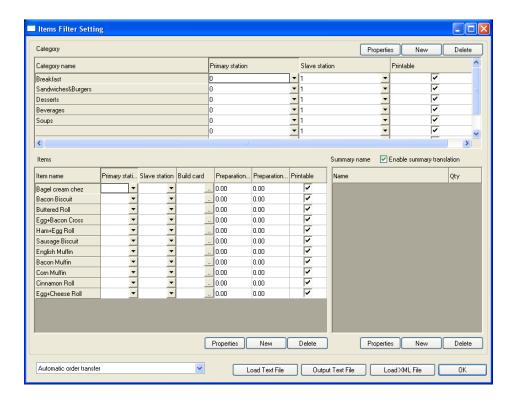
```
<Pre>Modifier>
<Count>1</Count>
<S0>seat 1</S0>
</PreModifier>
</Item>
<Item>
<ID>3</ID>
<TransType>1</TransType>
<Name>Pizza 2</Name>
<Category>Pizza</Category>
<Quantity>1</Quantity>
<Color BG="180" FG="215" />
<Pre>Modifier>
<Count>1</Count>
<S0>seat 2</S0>
</PreModifier>
</Item>
</Order>
</Transaction>
```



Note that there are 2 methods to send the order(s) to specific kitchen station(s).

By <Category> tag and filter of KDS

Add <Category> tag into an item in order XML file and send this order to KDS. Once KDS reads this order, it will automatically add that category to filter (or refer to page 35 of this manual to manually add categories). Afterward users need to specify to which station this category will be distributed (First stop KDS, click "LS Setting" button on the top, click "Default" station on the left column, in the "LS# Setting" window, click "Filters and Status Bar". On the right panel, click "Item Filter Setup", an "Items Filter Setting" window will pop up). From then now, all items with that category will be sent to the station users specified.



By <KDSStation> tag in order XML file

Add <KDSStation> tag into an item in order xml file. Therefore, once KDS reads this order, it will directly send that item to usersr specified station.

For detail, please refer to "C:\Program Files\Logic Controls KDS\ForPOSDevelopment\XML Description.txt".

Bump Bar Operation for Kitchen Station

Function	Bump Bar Key1	Bump Bar Key2
Move highlight to Next	Right arrow	Ctrl+6
Move highlight to Previous	Left arrow	Ctrl+7
Bump order	Enter	Ctrl+0
Unbump order	Ctrl	Ctrl+2
Select next item	Down arrow	Ctrl+8
Summary Panel On/Off	-	Ctrl+5
Change # Panels/Screen	Space	Cttrl+3
Play video/Build Card On/Off (If applicable)	Space + Enter	Ctrl+4
Sort orders by		Space
Park Order		2
Parked orders list		Ctrl + Space
Help		Ctrl+1

Note: The keys shown above are for bump bar legend A.

Upgrading LCKDS Software

Please Note:

If users want to keep the previous KDS settings, please follow the steps as below to update.

If the KDS settings or database structure has significant changes, the following steps may not apply. In this case, users have to manually reset all settings.

Copy the old "kdssetting.xml", "filter.xml", and "backup.db" files from LCKDS installation folder (default is C:\Program Files\Logic Controls KDS) to a backup folder.

Uninstall the old LCKDS software.

Install new LCKDS software.

Copy the backed up "kdssetting.xml" and "backup.db" files to the new LCKDS installation folder (default is C:\Program Files\Logic Controls KDS) and overwrite the installed files to restore previous KDS settings.

Just in case, if the database structure of backup.db has significant changes (After overwriting the backup.db file, users can't see imported the filter settings inside KDS), users can import the filter settings by the following steps.

Stop KDS.

Delete backup.db in installation folder (default is C:\Program Files\Logic Controls KDS). Run KDS. KDS will automatically generate a new blank backup.db.

Copy the backuped filter.xml to order source folder (default is C:\Program Files\Logic Controls KDS\orderinfo). KDS will automatically import backuped filter settings into the new backup.db.

FAQ

Question: The KDS Manager could not connect to the stations (LS6000/LS9000), why? **Answer:** Do the "LS testing" before the user try to run the KDS Manager. Check the connections among PC, the Hub and the stations. Also check if the IP addresses are consistent.

Question: After sending an order to the orderinfo folder, nothing shows up on the screen, why?

Answer: Make sure the format of the order file is XML. If users did copy and paste, make sure it is the file not the shortcut. In addition, check if the order source folder is the "orderinfo" under System setting.

Question: Where is the Order File Source Path (ex: C:\Program Files\Logic Controls KDS\orderinfo) saved?

Answer: Order File Source Path is stored in "c:\program files\logic controls kds\kdssetting.xml" file as <DBPath>C:\Program Files\Logic Controls KDS\orderinfo</DBPath>.

Question: Does item-based build card support LS6000 or LS9000?

Answer: No, LS6000/LS9000 only supports playing build card **locally**. Item-based build card function is only supported in LS6000_Simulator (Kitchen_hNet). Users can find the corresponding instruction in <<Logic Controls Kitchen Station User Manual.pdf>>.

LS9000 Supports a more rich build card feature where video files and pictures are store

locally into the station SD card and can be launched independent of the KDS Manager functionality.

Question: System gets slow after a while, why?

Answer: 1) Make sure "Sys Setting" button on top toolbar -> "Log" tab -> "None" is

checked. 2) Get the latest KDS Manager from Logic Controls.

Question: What's the expeditor?

Answer: The expeditor station will display all orders, no matter expedited orders or non-expedited orders. After users set up an expeditor station, an order will be sent to station users specified in <KDSSation> tag or on the KDS Manager Filter seetings AND that expeditor station at the same time. If an order is bumped in non-expeditor station, the same order in expeditor station will be marked with any special char (e.g. *, #). Looking at the expeditor station, managers/waiters/servers know the status of the orders being prepared at the kitchen.

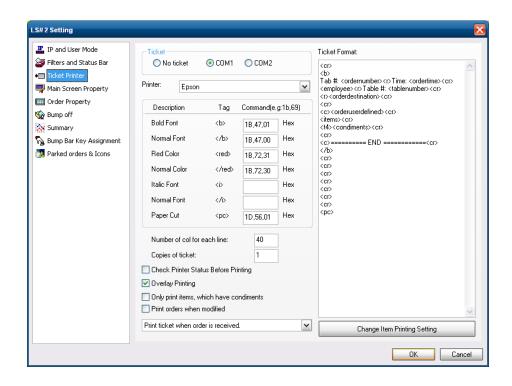
Question: What is the format for importing icons?

Answer: KDS can accept 24bit or less color depth bmp and jpg files as icons displayed on the order header or footer. On the background, it will convert it to 16x16 pixels icon for LS6000 and use "Send Bitmap" command to send the bitmap to kitchen stations.

Question: How to make the fonts on the receipt printed in bold or in large size? The order time appends a blank space at the end, why?

Answer1: Enter the correct command set for the corresponding tag as shown below. For example, the Command set for most Epson printer to print the fonts in bold is 1B, 21, 08, and to print the fonts in double heights is 1B, 21, 10.

Answer2: Try to adjust the value of "Number of col for each line".



Question: why are some items going to the default station?

Categories are case sensitive. If the category of the items in the order is different from the category in the filter, (for instance, Pizza and pizza); the KDS will create a new category with no primary and slave stations. Therefore, the items will go to the default station.

Question: The condiment does not follow the correct items, why?

Answer: Check the xml file first to see if the format is correct. In addition, it could be caused by the same items ID because the item IDs in the same order should be unique as well.

Question: What is the content of LOG file?

Answer: Most of its content is about parsing orders info. It does include "KDS Opened" info; however, it doesn't include "KDS close" info.

For example,

2011-11-04 21:43:34>>Logic Controls KDS Opened

2011-11-04 21:54:45>>Find file RR010100524N003215446216-000.XML

2011-11-04 21:54:45>>Parse file RR010100524N003215446216-000.XML

2011-11-04 21:54:45>>CDBXML::ParseXmlFile:enter

filename=RR010100524N003215446216-000.XML

- 2011-11-04 21:54:45>>After Parsed KDS info
- 2011-11-04 21:54:45>>After read transaction
- 2011-11-04 21:54:45>>After get order info
- 2011-11-04 21:54:45>>After starttransaction(), call Do_OrderAction
- 2011-11-04 21:54:47>>After do_orderaction()
- 2011-11-04 21:54:47>>After ParseXml_GetItemsCount():1
- 2011-11-04 21:54:47>>Start item parse
- 2011-11-04 21:54:47>>Get item's order ID
- 2011-11-04 21:54:47>>After get item information
- 2011-11-04 21:54:47>>transtype!=2
- 2011-11-04 21:54:47>>After item action
- 2011-11-04 21:54:47>>condiment count=:1
- 2011-11-04 21:54:48>>Go to item tag
- 2011-11-04 21:54:48>>Get condiment
- 2011-11-04 21:54:48>>Get condiment info
- 2011-11-04 21:54:48>>Prepare to do condiment action
- 2011-11-04 21:54:48>>After condiment action
- 2011-11-04 21:54:48>>Next condiment
- 2011-11-04 21:54:48>>Clear itemxml variable
- 2011-11-04 21:54:48>>Next item
- 2011-11-04 21:54:48>>prepare to end parsing
- 2011-11-04 21:54:48>>prepare to end parsing 1
- 2011-11-04 21:54:48>>prepare to end parsing 2
- 2011-11-04 21:54:48>>prepare to end parsing 3
- 2011-11-04 21:54:48>>parsing end.
- 2011-11-04 21:54:48>>Remove file:RR010100524N003215446216-000.XML
- 2011-11-04 21:54:48>>Removed it.