Epson® KDS Setup Guide
Welcome to the Epson KDS (Kitchen Display System) Setup Guide.
For a printable PDF copy of this guide, click here.
Setting Up the Hardware

See the instructions in these sections to connect the hardware for your kitchen display system (KDS).

About the Epson Kitchen Display System (KDS)
Setting Up a Direct Connect System
Setting Up a Multi-Station System

About the Epson Kitchen Display System (KDS)

The Epson TM-U220-i, TM-T88V-i, and TM-L90 Plus-i LFC printers include powerful on-board systems that drive a Kitchen Display System (KDS) capable of controlling multiple stations and screens.

The Epson KDS can be arranged in two configurations: a single-station or multi-station system.

A single-station system is comprised of the following:
• The Epson TM-U220-i, TM-T88V-i, or TM-L90 Plus-i LFC Direct-Connect printer with on-board KDS controller
• A POS terminal connected to the printer via USB, Ethernet, or serial (RS232) cable via a USB-serial dongle
• A bump bar connected directly to the printer via USB connection
• A monitor connected directly to the printer via VGA connection

The multi-station system is comprised of the following:
• The Epson TM-U220-i, TM-T88V-i, or TM-L90 Plus-i LFC Multi-Station printer with on-board KDS controller
• A POS terminal connected to the printer via a USB, serial (RS232), or Ethernet connection
• Up to 9 stations with bump bars, monitors, and Epson KDS expansion modules connected to a local network via an Ethernet connection

KDS Hardware and Software Requirements

Parent topic: Setting Up the Hardware

KDS Hardware and Software Requirements

Before you set up your Epson KDS, make sure that your computer and other hardware meet the following requirements:
Operating System       Windows 10, Windows 8.x, Windows 7
POS System             Aldelo, Aloha, Breadcrumb, Cake, Casio 6000, Casio 6600, Digital Dining, Dinerware, Duet, Epson, Galaxy, Lavu, LineSkip, Linga, Media Mix, Micros 3700, Micros E7, Micros Symphony, NCC USA, Positouch M5, Shift4, ShopKeep, Skywire, Squirrel, Talech SE, Talech, or Tavlo
Display                Any HD widescreen monitors that support at least 1680 × 1050 resolution with an available VGA port, ELO 2201L Touchscreen – IntelliTouch ZB (Worldwide) – E382790, ELO 2201L Touchscreen – PCAP (Worldwide) – E497002
Bump Bar               Logic Controls KB1700 USB

Parent topic: About the Epson Kitchen Display System (KDS)

Setting Up a Direct Connect System
You can connect your KDS hardware in a single-station, direct connection configuration. You can then run the Epson KDS Configuration Utility from a laptop or PC as long as your KDS and laptop or PC are on the same network.

1. Unpack the printer and perform basic setup as described on the **Start Here** sheet.
2. Connect a USB, Ethernet, or serial (RS232) cable via a USB-serial dongle to the corresponding port on the back of your TM-U220-i, TM-T88V-i, or TM-L90 Plus-i LFC printer.
3. Connect the other end of the cable to your POS terminal.
4. Connect a VGA cable to the VGA port on the back of the printer.
5. Connect the other end of the cable to the VGA port on the monitor.
6. Connect a USB cable to one of the USB-A ports on the back of the printer.
7. Connect the other end of the cable to the USB port on the bump bar.
8. Connect an Ethernet cable to a laptop or PC.
9. Connect the other end to the corresponding port on the back of the printer.
10. After connecting the hardware, run the Epson KDS Configuration Utility on the laptop or PC to complete setup.

**Note:** The Epson KDS Configuration Utility can only be run if your KDS and laptop or PC are on the same network.
Setting Up a Multi-Station System

You can connect your KDS hardware in a multi-station configuration. You can then run the Epson KDS Configuration Utility from a laptop or PC as long as your KDS and laptop or PC are on the same network.

1. Unpack the printer and perform basic setup as described on the Start Here sheet.
2. Do one of the following:
   • Connect your POS terminal to your printer via USB or serial (RS232) cable. (KDS Menu Routing)
   • Connect your POS terminal to the router or network switch via Ethernet cable or Wi-Fi. (POS Menu Routing)
3. Connect an Ethernet cable to the back of the printer.
4. Connect the other end of the cable to the router or network switch.
5. Connect an Ethernet cable to the back of the KDS expansion module.
6. Connect the other end of the cable to the router or network switch.
7. Connect a USB cable to one of the USB-A ports on the back of the KDS expansion module.
8. Connect the other end of the cable to the USB port on the bump bar.
9. Connect a VGA cable to the VGA port on the back of the KDS expansion module.
10. Connect the other end of the cable to the VGA port on the monitor.
11. Repeat steps 6 through 11 for each additional display station.
12. Connect an Ethernet cable to a laptop or PC.
13. Connect the other end of the cable to the router or network switch.
14. After connecting the hardware, run the Epson KDS Configuration Utility on the laptop or PC to complete setup.

Note: The Epson KDS Configuration Utility can only be run if your KDS and laptop or PC are on the same network.

Parent topic: Setting Up the Hardware
Related tasks
Getting Started with the KDS Configuration Utility
Running the KDS Configuration Utility

See the instructions in these sections to configure your Epson KDS.

About the Epson KDS Configuration Utility
Getting Started with the KDS Configuration Utility
Adding and Configuring Devices
Adding and Configuring Displays
Configuring Order Tiles
Adding Menu Items and Recipes
Completing Setup

About the Epson KDS Configuration Utility

The Epson KDS Configuration Utility lets you set up, customize, and manage a kitchen display system that includes Epson devices, bump bars, and displays. You can download the Epson KDS Configuration Utility from the Epson support page for your product (Epson TM-U220-i, Epson TM-T88V-i or Epson TM-L90 Plus-i LFC).

Before you run the configuration utility, check the following:

• The system is connected via Ethernet, the LAN connection supports broadcasting throughout the network, and that port 3289 is open for UDP packets, port 3290 is open for both TCP and UDP packets, and ports 80 and 9100 are open for TCP packets.

• Disable any firewalls on the PC that will run the configuration utility.

• Confirm that the PC is connected to the same network as the KDS, or is connected directly to the printer.

Parent topic: Running the KDS Configuration Utility

Getting Started with the KDS Configuration Utility

When you run the Epson KDS Configuration Utility for the first time, you can use the setup wizard to quickly detect and configure any available KDS devices.

1. Download and run the Epson KDS Configuration Utility on the computer that is connected to your KDS network or printer.
2. Enter the user name and password, and click **Log In**. (The default user name is **admin** and the default password is an empty field.)

You see this screen:

![Login Screen](image)

**Note:** If no configurations have been set, you will see the KDS - Getting Started pop-up. To continue from this pop-up, see step 12. Once you are done adding devices using the **KDS Setup Wizard**, return to steps 3 through 9. Otherwise, click **Cancel** and continue with step 3.
3. Under **Configuration**, enter the name of your business in the **Name** field.
4. Select the **POS Type** setting that matches your POS terminal.
5. Select the **POS Connected Device** that is physically connected to your POS terminal.

   **Note:** If you have not added devices, you will not see options in the **POS Connected Device** drop-down menu.

6. Select the correct **Business Start Time** setting.

   **Note:** The KDS performs maintenance during off-hours. Make sure you select the correct start time for your business to prevent interruptions during automatic system maintenance.

7. Select the **Clear History Daily** checkbox to erase the previous day's order history at the start of the business day.

8. Under **Printing on Bump**, enter the text you want printed at the top and bottom of the tile chit in the **Tile Header Text** and **Tile Footer Text** fields.

   **Note:** Make sure tile printing is enabled.

9. Enter **Item Header Text** and **Item Footer Text** for text printed at the top and bottom of the item chit.

   **Note:** Make sure item printing is enabled.

10. Under **Configuration & Settings**, click **KDS Wizards**.
11. Under **Wizards**, click **Start KDS Setup Wizard**.

You see this screen:

12. Do one of the following:
   - To assign IP addresses to the devices on your network and set them up, select **Configure the system for the first time**, click **Next**, and continue with the next step.
• If you previously set up the KDS and exported the settings, select **Load existing configuration from file or device**, click **Next**, and navigate to the XML configuration file. Follow the steps on the screen to load the settings.

• To set up the KDS without using the wizard, select **I am an expert, I will setup the system manually** and click **Next** to exit the wizard and continue setting up your KDS manually.

If you chose to configure the system for the first time, you see this screen:

![Wizard - Auto Detect Wizard](image)

13. Do one of the following:

• If you have connected the KDS devices to a router that will automatically assign dynamic IP addresses to each of them, select **Assign IP automatically using DHCP service** and click **Next**. (This is the fastest setup option, but may be less reliable than using manually-assigned static IP addresses.)

• If you want to manually define a static IP address for each connected device, select **Assign IP to my devices manually** and click **Next**. (This is more reliable than using dynamically-assigned IP addresses from the router's DHCP.)

• If you have already assigned static IP addresses to your devices, select **Do not configure IP settings for my devices** and click **Next**.

  **Note:** If you see a firewall warning, select **Allow access** so the configuration utility can discover and configure your devices.

14. Follow the steps on the screen to complete setup.

Any connected devices are now configured and appear on the utility’s **Devices** screen.
Adding and Configuring Devices

You can add and remove devices, or configure existing devices, on the Devices tab in the KDS Configuration Utility.

1. Click the Devices tab at the top of the screen.
   - If you used the setup wizard to automatically detect and add the devices on your network, the devices appear on the screen.
   - Note: If you previously exported device settings to a configuration file, click at the top of the tab to import the file.

2. Do one of the following:
   - To add a new device, click and follow the steps on the discovery screen that appears. Then follow the steps below to configure it.
   - To configure an existing device, select the device and follow the steps below.
   - To remove a device, click below the device.

3. Under Configuration, enter a name for the device in the Name field and a description for it, such as its location or specific function, in the Description field.
4. The master device needs to be identified. Do one of the following:

   • If using KDS Menu Routing and this device is the printer connected to the POS, select the
     Attached to POS checkbox.
   • If using POS Menu Routing and this device is the printer on the network that is not taking orders
directly from the POS, select the Attached to POS checkbox.

   **Note:** If you have only one printer on your network, the configuration utility automatically selects it
as the master device. Make sure you select the device connected to your POS station as the master
device, or the KDS system will not function correctly. You cannot make a KDS expansion module the
master device; only TM-U220-i, TM-T88V-i, or TM-L90 Plus-i LFC printers can be master devices.

5. Do one of the following:

   • If your KDS is in a single-station configuration, select the Is Printer checkbox, and, under Display
   Manager, select the monitor that is connected to the device as the Assigned Display setting.
   • If your KDS is in a multi-station configuration, and the device is used as a printer without a bump
   bar or display, select the Is Printer checkbox. The Display Settings options do not appear for
devices that have no assigned display.
   • If your KDS is in a multi-station configuration, and the device is not used as a printer, under
   Display Manager, select the monitor that is connected to the device as the Assigned Display
   setting.

   **Note:** You need to add and configure your monitors in the Displays tab before they will appear on
the Assigned Display menu.

6. Under Printing Functions, do the following as necessary:

   • Select the Print Chit checkbox if you want to print a chit when an order is placed.
   • Select the Print Item on Bump checkbox if you want to print an item when it is bumped off an
   order.
   • Select the Print Tile on Bump checkbox if you want to print a tile when it is bumped.
   • Select the Print Tile on Bump at POS checkbox if you want to print a tile at the POS when the
   order is bumped.

   **Note:** Printing Functions options vary depending on whether you selected Attached to POS and
Is Printer checkboxes.

Repeat these steps as necessary to add any additional devices.
Parent topic: Running the KDS Configuration Utility
Related tasks
Adding and Configuring Displays

Adding and Configuring Displays
You can add displays and customize their appearance on the Displays tab in the KDS Configuration Utility.

1. Click the Displays tab at the top of the screen.

You see a screen like this:

Note: If you previously exported display settings to a configuration file, click at the top of the tab to import the file.

2. Do one of the following:
   • To add a new display, click and follow the steps below to configure it.
   • To configure an existing display, select the display and follow the steps below.
   • To remove a display, click below the display.

3. Under Configuration, enter a name for the display in the Name field and a description for it, such as its location or specific function, in the Description field.
4. Select a **Tile Arrangement** setting to choose how tiles are arranged on the display.
5. To show a summary tile on the display, select the **Summary Tile** setting.
6. To change the amount of time that an order tile is shown before it becomes a priority order, adjust the **Priority Time** setting.
7. To change the amount of time that an order tile is shown before it becomes a rush order, adjust the **Rush Time** setting.

**Note:** You can change the color of priority and rush order tiles on the **Tiles** tab.

8. Do one of the following:
   - If you will use the display to expedite orders, select the **Is Expeditor** checkbox. (The expeditor display shows every order that is submitted from the POS system and will not filter out any menu items.)
   - If you will not use the selected display to expedite orders, you can filter the menu items shown on the display. In the **Menu Items Filter** section, select the checkboxes for groups or individual menu items you want to show on the display.

**Note:** If you have not entered any menu items or groups, you will not see options in the **Menu Items Filter** section.
9. If the summary tile is enabled for a display, you can select the items or groups you want shown on it.

   **Note:** If you have not entered any menu items or groups, you will not see options in the **Summary Tile Filter** section.

10. Under **Display Tile**, select a **Display Tile** setting from the drop-down menu, then adjust the format as necessary under **Display Tile Settings**.

   **Note:** You can also modify and display tile formats on the **Tiles** tab.

Repeat these steps as necessary to add or configure any additional displays.

**Parent topic:** Running the KDS Configuration Utility

**Related tasks**

- Configuring Order Tiles
- Adding Menu Items and Recipes

### Configuring Order Tiles

You can customize the appearance of the order tiles on the **Tiles** tab in the KDS Configuration Utility.

1. Click the **Tiles** tab at the top of the screen.

   You see a screen like this:
2. To add a new tile format, click , enter a name in the Display Tile Name field, and click OK.

   **Note:** If you previously exported tile settings to a configuration file, click to import the file.

3. Under **Configuration**, enter a description for the tile format in the Description field.

4. Select the following settings for the tile format:
   - Header Name
   - Lines Per Tile
   - Font Size

5. Under **Order Header Colors Settings**, select the text color you want to use for these types of orders:
   - Normal
   - Priority
   - Rush

   **Note:** You can adjust the amount of time an order tile displays before its status changes on the Displays tab.

6. Adjust any additional formatting for the tile as necessary.

**Parent topic:** Running the KDS Configuration Utility

**Related tasks**

Adding and Configuring Displays

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**Adding Menu Items and Recipes**

You can add menu items and groups, and enter recipe information for them, on the **Menu & Recipes** tab in the KDS Configuration Utility.
1. Click the **Menu & Recipes** tab at the top of the screen.

![Menu & Recipes Tab](image)

**Note**: If you previously exported menu and recipe items to a configuration file, click ![Import File](image) to import the file.

2. To add a menu item, click ![Add Item](image).

3. Enter the name of the menu item exactly as it appears on your receipts and click **Add Another**.

   **Note**: If the menu item name does not exactly match the name that appears on your receipts, the KDS cannot display orders correctly.

4. Repeat step 3 to add more menu items as necessary. When you are finished, close the Add Menu Item window.

5. Enter a description for each menu item in the **Description** field and a recipe for each item in the **Recipe** field.

6. To assign menu items to a menu group that you can filter on each display, enter or select a **Grouping** setting for each menu item.

7. When you are finished, click the **Displays** tab at the top of the screen.

8. Select one of the configured displays.

9. If a summary tile is enabled for the configured display, you see the **Summary Tile Filter** section. Select the menu groups or menu items that you want to show on that display.
10. In the **Menu Items Filter** section, select the menu groups or menu items that you want to show on that display.

11. Repeat steps 8 to 10 to add items to additional displays as necessary.

**Parent topic:** Running the KDS Configuration Utility

**Related tasks**
- Adding and Configuring Displays

### Completing Setup

Once you are done making changes to the KDS settings, you need to apply the settings to your master device. Click **Apply KDS Settings** at the top of the screen.

The settings you selected are uploaded to the master device and shared with the other devices connected to the system.

**Parent topic:** Running the KDS Configuration Utility
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