

Printer and Cash Drawer Installation and Setup Guide

Windows Printer Installation:

Installing your new printer in Windows is the first and most important step in setting up printers in MicroSale. MicroSale relies on the Windows printer drivers and port assignment.

The most common printer interface types are:

Parallel- this is an older printer interface and many modern PC's do not have a parallel (LPT) port. Vendor specific printer drivers are not necessary in most cases if using parallel interface.

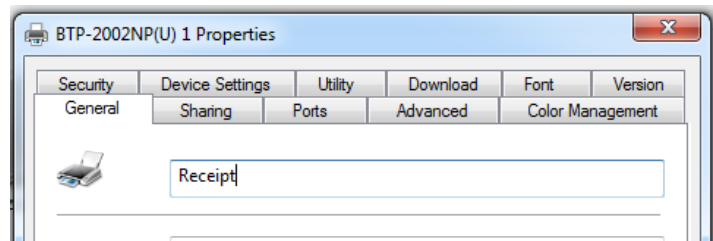
Serial- this port type is standardly available on most Pos workstations. Like the parallel interface, vendor specific printer drivers are not necessary in most cases when using serial. Serial interface is the slowest of the printer interfaces.

USB- this is the current standard for interfacing most peripherals to a computer. USB is fast and has little or no connectivity issues. USB printers do require vendor specific drivers to be installed to provide virtual printer ports for USB printers.

Ethernet- this interface is the ideal solution for remote printers; or for PC's with little or no connection options. Since Ethernet connects directly to the network switch/router it is not dependent on a direct connection to any workstations. This is a benefit in a situation when there is a hardware failure on a PC allowing the printer to continue to work for the other registers.

Install the printer using the vendor supplied installation package. Once the printer is installed in Windows it is a good idea to assign an appropriate name to the printer (i.e. kitchen, bar, expo, etc.) and maintain a standardized naming

system with all installations. To change the name of the printer go to Start → Settings → Printers, right-click on the printer installed and select "Printer Properties" from the list of available options. On the General Tab the top field will provide the current name; type in the new name and touch the "Apply" button to save the changes.



To make the printer the default windows printer (this is mandatory if installing a report style printer) right-click on the printer and select "Set as Default Printer" from the list of available options.

Once your printer is installed and named appropriately the next step is to print a Windows test page to confirm that the installation was successful. Again, go to Start → Settings → Printers, right-click on the printer installed and select "Printer Properties" from the list of available options. On the General Tab touch the "Print Test Page" button. If a test page does not print then there may be an issue with the installation or with the printer and /or interface.

!!Do not proceed to the next steps if you are unable to print a windows test page!!

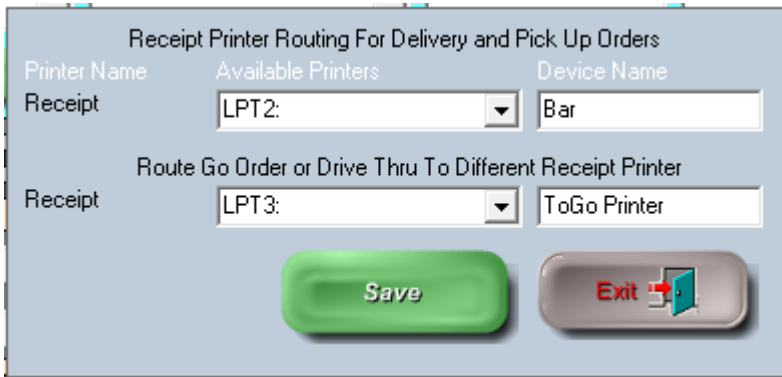
Now that you have successfully installed the printer in windows it is time to set it up in MicroSale. Go to Managers Menu → Register Setup → Printer/Devices setup.

Receipt Printer Assignment:

The top section is the receipt and report printer assignment. To assign a receipt printer click the drop-down arrow under “Available Printers” to display a list of printer ports installed on this PC. Select the port from the list that is to act as the receipt printer on this station. Once selected the “Device Name” field will populate the windows name of the printer attached. If you would like to set a failover printer in case the assigned stops working it can be assigned using the “Failed Printer” drop-down field. In order to use the “Failed Printer” option it does require that the vendor specific drivers for that printer must be used; “Generic/Text Only” will not work. Touch “Save” to apply the settings.



The receipt printing can be set to route to another device based on the order destination of the transaction. To set this click on the “Route Receipt” button next to the receipt printer assignment to open the window seen below.



By clicking the drop-down menu for “Available Printers” you can select alternate devices for receipt printing for Phone Orders as well as Go Orders and Drive Thru Orders.

Report Printer Assignment:

Below the receipt setup is the report printer assignment. This can be used to assign a report printer in MicroSale to generate all reports in an 80-column report format as opposed to the 40-column POS format. Like the receipt printer setup click the drop-down arrow under “Available Printers” to display a list of printer ports installed on this PC. Select the port from the list that is to act as the report printer on this station. Once selected the “Device Name” field will populate the windows name of the printer attached. Touch “Save” to apply the settings. To print to the report printer you will need to enable it by going to Managers Menu → Register Setup → Register options by Terminal → Printing/Cash drawer and putting a check in the box labeled “Send reports to Office Printer”. The printer used must be set as the default printer in windows.



In order to use the email reports function in MicroSale a report style printer must be installed and set as the default printer in Windows. If you do not have an actual report printer to install or would simply prefer to print to a 40-column Pos printer but still maintain the ability to email reports then you will want to install a printer in Windows using actual printer drivers and assign the printer to a device port that will format print jobs without affecting the Windows print spooler; such as the “XPS Port”. You must also make sure that “Send reports to Office Printer” is not enabled in register options if using this setup.

Remote Printer Assignment:

Next on the list is the remote printer setup. This is where devices are assigned to act as the remote printers for this register. The first field on the left, “Printer Name”, is where the MicroSale name for the remote printer is entered. Using a keyboard, type in the name you wish to use. This is the name you will use to assign your menu items to a remote printer. The next field, “Available Printers”, the drop-down menu where you select the available printer ports on this register. Once the printer port is selected the “Device Name” field will populate with the Windows name of the device selected. Be sure to “Save” after assigning each remote printer.



Like in receipt printer setup, a “Failed Printer” can be assigned for each remote printer. Again, In order to use the “Failed Printer” option it does require that the vendor specific drivers for that printer must be used; “Generic/Text Only” will not work.

Each remote printer can also be set to route to another printer based on the destination of the order. Once you have a remote printer selected so that it’s assigned device is populated you can click on the drop-down menus for “Go Order” as well as “Delivery Order” and assign a different device for one or both types of orders. To enable this feature you must also go to Managers Menu → Register Setup → Register Options by Terminal → Printing/Cash Drawer Options → Advanced Options, and put a check in the box next to “turn on remote printer routing for go and delivery orders”.

Cash Drawer Setup:

The cash drawer setup allows you to configure up to two cash drawers on the current workstation. Generally, the cash drawer interfaces to MicroSale using the drawer kick found on most POS printers. Alternately, MicroSale can also interface to cash drawers using serial ports. By clicking the drop-down menu next to “Cash Drawer #1” you can select the printer name or the serial port that the cash drawer is connected to. In this example the Cash Drawer #1 is connected using the drawer kick on the printer named “receipt”. The codes loaded by default for Cash Drawer #1 and Cash Drawer #2 can be used with any make/model of cash drawer. Touch the “Save Drawer” button to apply changes.

Cash Drawer Setup						
Cash Drawer #1	Receipt	27	112	0	25	250
Cash Drawer #2	None	27	112	1	25	250

If two cash drawers are being used it is important that the register option “Drawer #1 Opens for all cashiers” is not enabled on the POS station. This option can be found by going to managers menu → register setup → register options by terminal → printing /cash drawer options.

As stated previously an alternative to using the printer drawer kick interface is using a cash drawer with a serial interface to connect directly to the POS station. This type of interface is required if the location would like to restrict access to the cash drawer (No Sale/Open Drawer) in the middle of another transaction.

Printer Escape Codes:

For each printer being used in MicroSale the printer escape codes must be loaded. The printer driver screen can be accessed by selecting the “Printer ESC Codes” button located below the cash drawer setup area. Once selected it will take you to the screen shown below.

The left side of the screen is the “Printer Driver Setup” section. To begin, click the drop-down menu next to “Printers” to select the MicroSale printer you want to load escape codes for. In this example we have selected “Kitchen”. Next, click the drop-down menu next to “Types” to select the ESC codes to use. The default available is named “Tm88 II” and is compatible with most printers with Epson emulation. However, if you experience formatting issue a list of optional codes is located in the “Appendix-Printer Escape Codes” section found at the end of this guide. Once the drivers are selected touch the screen where it says “Click here to Load” in order to

populate all of the code fields for that printer. Once the fields have been loaded click the “Save to Printer” to apply the changes to the selected printer.

The section located on the right side of the screen is for alternate printer code settings for available features in the POS. Below is a brief description of each of these areas.

Bar Code Width- sets the size of the receipt bar code.

Bar code for Receipt Printer (check Number)- sets the size as well as the type of barcode printed on the receipt for scanned check numbers.

Bar Code Width- sets the size of the Type-2 bar code.

Bar Code for Kiosk (type 2 Code)- sets the size as well as the type of barcode printed on the receipt for Type-2 barcoded menu items.

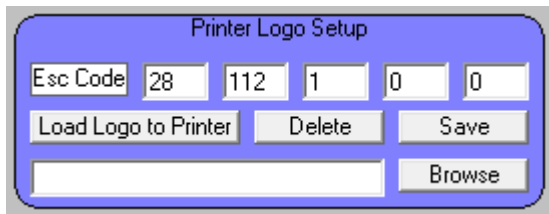
Table Tent Setup- sets the size of the “Order Number” on printed table tent.

Expanded check Number on Receipt- sets the size of the “Check Number” on the customer receipt.

Sold to Header- sets the size of the “customer Name” printed on the customer receipt.

Printer Logo Setup:

Located on the bottom of the printer setup screen is the log setup utility. This allows you to upload a custom store logo onto the printer so that the logo appears on top of each customer receipt. Before attempting to load the image file please make sure that it is saved as a Monochrome Bitmap, and no larger than 12k and 480x384 pixels.



The screen capture above shows the default codes to use when loading a logo.

Enter the Esc Codes: 28, 112, 1*,0**,0

(* this is the number of the logo you want to print)

each printer can store multiple images

(** this is the desired size of the logo)

0 - default size

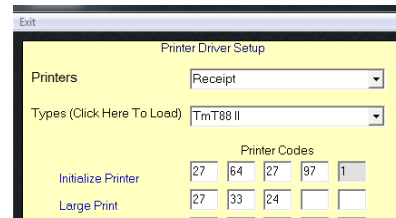
1 - double wide

2 - double high

3 - double wide and double high

Use the “Browse” button to locate the bitmap file you wish to load onto the printer. Once selected click on the “Load Logo to Printer” button to upload the bitmap image. Once completed touch the “Save” button to apply changes.

The receipt printer codes will also need to be adjusted to accommodate the logo setup. Go back to the “Printer escape Codes” section and select the receipt printer from the drop-down menu next to “Printers”. The first line of codes for the printer is the “Initialize Printer” line. By default, it is 27, 64. To make it work with the logo the line needs to read as follows: 27, 64, 27, 97, 1 as shown in the image to the right. Use the “Save to Printer” button to apply the changes.



Remote Print Toggle:

To set up a menu button that will allow the remote printer to be switched "on the fly" per order. The menu items will go to their normally designated printer by default unless you use the toggle button before tendering or touching "done" on the order.

In Windows, you will need to install both printers that will be the toggle choices for the remote printing. In our example they are Bar1 and Bar2.



In MicroSale you will also set up both printers as remotes. In this example, the menu items themselves will be assigned to the Bar1 printer as the default.



Next, create a menu item. The menu item name needs to be the name of the printer you wish to send to. You can use button alias field to provide a better description for the button. i.e. in this example the menu item name is called "Bar2" but the button alias says "Send to Tiki Bar".

Create the menu item in whatever category that you desire it to be in. Be sure to assign the menu item to the department "**Alternate Remote**".

After the menu item is created you will need to add the functions.ini to the MicroSale directory on each register in which you wish to use this toggle. And configure the Printing Options accordingly. See below for an example of the .ini file. The other remote printer name (Bar1) would be put into the "Alternate Remote 1" field.

[Printing Options]

Alternate Remote 1=**Bar1**

Alternate Remote 2=

Appendix-Printer Escape Codes:

Epson and Epson Emulation Printers

	1	2	3	4
Initialize Printer	27	64		
Large Print	27	33	16	
33 Col Print	27	33	0	
Black Print	27	114	0	
40 Col Print	27	33	1	
Cut	27	105	0	
Form Feed	27	100	9	
Line Feed				
Center Text	27	97	1	
Left Justified Text	27	97	0	
Print Color	27	114	1	

Epson Printers Bold

	1	2	3	4

Initialize Printer	27	100	10	
Large Print	27	33	57	
33 Col Print	27	33	0	
Black Print	27	114	0	
40 Col Print	27	33	1	
Cut	27	105	0	
Form Feed	27	100	9	
Line Feed				
Center Text	27	97	1	
Left Justified Text	27	97	0	
Print Color	27	114	1	

Star and Star Emulation Printers

	1	2	3	4
Initialize Printer	27	64		
Large Print	14			
33 Col Print				
Black Print	27	53		
40 Col Print	20			
Cut	27	100	48	
Form Feed	27	97	8	
Line Feed				
Center Text				
Left Justified Text				
Print Color	27	52		

Citizen Thermal 3210 Printers

	1	2	3	4
Initialize Printer	27	64		
Large Print	27	33	30	
33 Col Print	27	33	10	
Black Print	27	114	0	
40 Col Print	27	33	10	
Cut	27	105		
Form Feed	27	100	5	
Line Feed				
Center Text	27	97	1	

Left Justified Text	27	97	1	
Print Color	27	114	1	

Citizen 3540/3541 (drawer pop 7)

	1	2	3	4
Initialize Printer	27	64		
Large Print	14			
33 Col Print				
Black Print	27	53		
40 Col Print	20			
Cut	27	100	48	
Form Feed	27	97	8	
Line Feed				
Center Text				
Left Justified Text				
Print Color	27	52		

Citizen 3420 (Epson Emulation)

	1	2	3	4
Initialize Printer	27	64		
Large Print	27	33	1	
33 Col Print	27	33	0	
Black Print	27	114	0	
40 Col Print	27	33	0	
Cut	27	109		
Form Feed	27	100	5	
Line Feed				
Center Text				
Left Justified Text				
Print Color	27	114	1	

KIOSK LPT PRINTER CODES FOR CARS

	1	2	3	4
Initialize Printer	27	29	116	1
Large Print	27	105	1	49
33 Col Print	27	77		
Black Print	27	53		
40 Col Print				
Cut	27	100	48	
Form Feed	27	97	8	
Line Feed				
Center Text				
Left Justified Text				
Print Color	27	52		

Digi WebQuote Printer Escape Codes

	1	2	3	4
Initialize Printer	27	64		
Large Print	27	33	17	
33 Col Print	27	33	1	
Black Print	27	114	0	
40 Col Print	27	33	1	
Cut	27	105	0	
Form Feed	27	100	9	



Line Feed				
Center Text	27	97	1	
Left Justified Text	27	97	0	
Print Color	27	114	1	

Epson Cash Drawer Codes

27 112 0 25 250

Thermal Samsung Cash Drawer Codes

27 112 0 10 40

Star Cash Drawer Codes

27 7 11 55 7