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# Beginner's Guide to Point of Sale

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Are you looking to purchase your first restaurant POS system? Interested in switching to a new restaurant POS? Enjoy reading online guides with informative graphics? **Our Beginner's Guide to Restaurant POS is an informative resource for all the above.**



# 1: Introduction to Point of Sale (POS)

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## What is a restaurant Point of Sale System?

Commonly called POS, a restaurant Point of Sale system refers to the ordering and payment system used in establishments such as cafes, restaurants, pizzerias, bars, coffee shops, food trucks and bakeries. These systems can be as simple as hand written tickets with a cash register, or as advanced as iPad terminals equipped with visual menu ordering modules.



Over the last four years, the restaurant POS industry has been revolutionized by technology, with more powerful and easy to use features introduced on a regular basis. It is important to stay well informed, as you never know when the next big improvement will arrive.

## Why do I need a POS System?

Restaurant POS systems can go far beyond just taking orders and completing transactions. While those are the main features, a restaurant POS can also improve the efficiency of your operation.

An advanced restaurant POS system allows you to:

- Decrease order times with an intuitive interface.
- Delight customers by offering features such as tableside payments and emailed receipts.
- Utilize extensive reports to determine hours of operation and labor costs.
- Track sales and inventory levels hourly, daily, monthly and year over year.
- Increase table turnaround by placing POS systems at every table.

## How much of this guide do I need to read?

We've tried to make this guide as easy to read as possible while still covering the most important topics related to restaurant POS. **If you own a restaurant, or are opening your first one, we highly recommend that you read the whole guide.** Every topic in this guide explains a different, yet equally important topic related to restaurant POS systems. This guide is available in PDF format if you'd like to take it on-the-go. We have also included links to other experts on the various topics that we cover throughout the guide.

## 2: What are my restaurant POS options?

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### Cash Register

#### No Electronic Payments Accepted

A cash-only POS system relies heavily on employees in order to function properly. Orders are hand-written and delivered to the kitchen where they are read by the cooks. Payments have to be cash, which can limit your customer base due to the steadily declining number of people who regularly carry cash. A system so heavily reliant on penmanship is not typically preferred by high-volume, high-revenue restaurants.

Cash-register-only POS systems are most commonly found in small venues such as food trucks, coffee shops, and farmers markets. The greatest benefit to a cash register system is the cost of operating. Aside from the cost of the register, it's free, and it's hard to beat free.



### Credit Card Machines

#### And other forms of electronic payments

More common than cash registers, these systems are used in restaurants of all sizes that accept credit card payments. Credit card machines enable you to accept electronic payments such as credit and debit cards, and increasingly, near field communication (NFC) payments like Apple Pay and Google Wallet. However, they are unable to provide inventory or sales reports. This system requires minimal hardware, consisting of a credit card terminal with a small screen, a number pad, a built-in credit card swiper, and sometimes a signature

pad. Restaurants using this system are usually operating on hand-written tickets and rely on mental math or calculators for tabulating sales totals. These credit card terminals are fairly expensive and you must sign a contract with a credit card processing company. This means a percentage of each credit, debit, and NFC payment will be collected by the processing company.



## All-in-One

Ordering, payments, reporting,  
and employee management

The all-in-one system will enhance the efficiency of your restaurant because everything is transmitted wirelessly.



Many restaurants necessitate more than simple payment acceptance. These establishments opt for a POS system with a vast feature set: a wireless ordering system, employee management capabilities, and extensive reporting. Touch screen terminals are used to enter food and drink orders which are then sent to kitchen or bar printers, or a digital kitchen display screen. Payments are processed at the touch screen terminals where credit card receipts are then issued either by paper or email. This type of system will enhance the efficiency of your restaurant because everything is transmitted electronically.

Since the early '90s, comprehensive POS systems were only offered by a handful of large companies. With the introduction of the Apple iPad in 2010, developers began creating software applications for tablet computers with the same functionality as existing POS systems. It wasn't long before tablet based POS systems began outperforming their legacy counterparts.

In the last few years multiple companies have formed around creating a complete POS system that operates on existing tablets. Some of these companies have created unique tablets specifically to run their POS system. Tablet based companies generally favor monthly hosting fees over contracts and some charge a one-time license fee for their software. Hardware bundles are available with almost all tablet systems either through the software company or third-party vendors. As these companies add features and update the software, upgrades are usually offered to users free of charge. Systems that operate on the iPad are frequently called iPad POS systems.

### 3: How do I start accepting electronic payments?

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**Cash-only establishments are rare and limited to select business types, so it's safe to assume that restaurants opening today want to accept credit card payments. To do so requires specific hardware, as well as signing up with companies who specialize in processing electronic payments. Here's the information that you need to make an informed decision and get that money train started.**

#### **Merchant Service Provider**

Merchant service providers (MSP) go by many names: merchant account provider, credit card processor, processor, or most commonly just MSP or MAP. MSPs are occasionally banks, but more often are companies who securely handle credit card data and facilitate the transaction between the merchant's (YOU) and customer's bank accounts. As previously mentioned, MSP's receive a portion of every electronic transaction. The percentage rate depends on volume of sales, average transaction amount, and a myriad of other factors, but usually falls in the range of 1.5% to 3.0%. Some MSPs offer a fixed rate across the board.

#### **Near Field Communication, or NFC Payments**

NFC technology enables devices to conduct credit card transactions by placing two devices within centimeters of each other. Each device must have a special chip which operates as an antenna and stores the payment information of each party. This is the technology used for Apple Pay and Google Wallet.

#### **Gateway**

A payment gateway is a company that handles the transfer of an electronic payment in an encrypted form from the POS to the processor. For security reasons the encryption process occurs instantly within the swiper. Frequently, but not always, your MSP will also be your gateway.

To help you better understand we've included a step by step process:

- A customer hands you a credit or debit card.
- You run the card to a swiper connected to your POS terminal.
- The credit card information is immediately encrypted by the payment gateway and sent off to an MSP.
- MSP sends the data to the merchant's bank first, then your bank.
- The transaction receives an authorization code from the banks.
- The MSP sends the credit card data with the transaction's authorization code back to the your POS terminal.
- The credit card data is then decrypted and is displayed as either accepted or declined.

Remarkably, this entire process is completed between 2-3 seconds.

## 4: What hardware do I need for restaurant POS?

Every POS system needs hardware, the question is how much. The size of your restaurant will dictate the amount of terminals, printers, credit card readers needed. Many devices can be incorporated into the system as extensions to increase efficiency and value. Below is a list of necessary hardware, as well as a few of the most popular extensions.



### Terminal

The most important part of every POS system is the terminal. Whether it's as simple as a cash register, or a state of the art tablet, the terminal is the most heavily used piece of equipment. A terminal is typically the hub for many actions, such as placing and sending food orders, and swiping and completing credit card transactions. The terminal itself can be a touch screen monitor, or increasingly, an iPad, Android tablet, or proprietary tablet computer.



### Smartphones and Tablets

These mobile devices may be used to place orders into the system right at the table. Upgrading these devices to accept payments will likely cost extra. Software-based restaurant POS systems frequently offer additional apps that can be used on smartphones and personal tablets. These apps allow owners and managers to view sales and inventory reports on personal phones so they can keep tabs on what's happening at work while on-the-go.



### Cash Drawer

These were the original POS system, and haven't really changed much over the years. Their main functions are still to secure your cash and make a "ka-ching" noise when opened.



## Credit Card Reader

Credit card readers are commonly attached to the terminal, and are often referred to as credit card swipers. As you remember from the last section, the swiper encrypts credit card data before it's sent off to your merchant service provider. Common types of credit card swipers are:

- USB - plugs into your receipt printer.
- Lightning port - plugs into the charging port of your iPad.
- Headphone jack - plugs into the headphone jack, available for Android tablets and iPads

## Customer Facing Display

Popular among quick serve and counter service restaurants, a customer facing display is just that: a screen that faces the customer. This allows your customers to view and verify their order, as well as pay for the food without handing their credit card over.



## Kitchen Display Systems

Similar to customer facing displays, these devices are placed where a chef, barista, or prep cook can see pending orders in chronological order. Designed to replace paper tickets, kitchen display systems are popular in coffee shops and large, high volume kitchens.



## Electronic Scales

Delis, weight-based tea and coffee shops, and self-serve frozen yogurt shops can all benefit from using a scale that is integrated with a POS system. With more advanced systems, the price of the weighed item is automatically totaled and displayed on the terminal, and the amount of the item is immediately removed from your inventory after the transaction is complete.

## Customer Ordering System

A new trend among restaurants is placing a terminal at every table. Customers place their orders and pay for their meal completely on their own schedule. Employees are free to run food and drinks while answering any questions. These terminals can also be used as additional revenue sources by including pay-to-play games.

## 5: Point of Sale Regulations Cover Your Assets (CYA)

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**Due to the concerns that surround financial transactions there are a few rules restaurant owners should be aware of. Below are the two most universal regulations and we recommend new restaurant owners look into which, if any, state and local regulations apply to them.**

### **Fiscal Memory Devices**

Fiscal memory devices are required by law in roughly 27 countries around the world. In these countries, cash registers and printers come equipped with a memory device that records every transaction that is run on the machine. At the end of every year the data from these machines must be sent to the government for taxation purposes. If you happen to live in a country with these requirements, make sure your POS system is integrated with a fiscal memory device.

### **PCI DSS and Compliance**

PCI, or Payment Card Industry, is an independent body that was created by Visa, MasterCard, AmericanExpress, Discover and JCB. PCI created a set of requirements called data security standards (DSS) which ensure that all credit card information is processed securely. As a restaurant owner it is up to you to ensure your establishment is PCI compliant. This involves making sure both your credit card reader and processor is compliant. MSPs and gateways generally ensure that their systems are up-to-date and meet the DSS, however it's always worth double checking with a company before signing up.

### **Fraud and EMV**

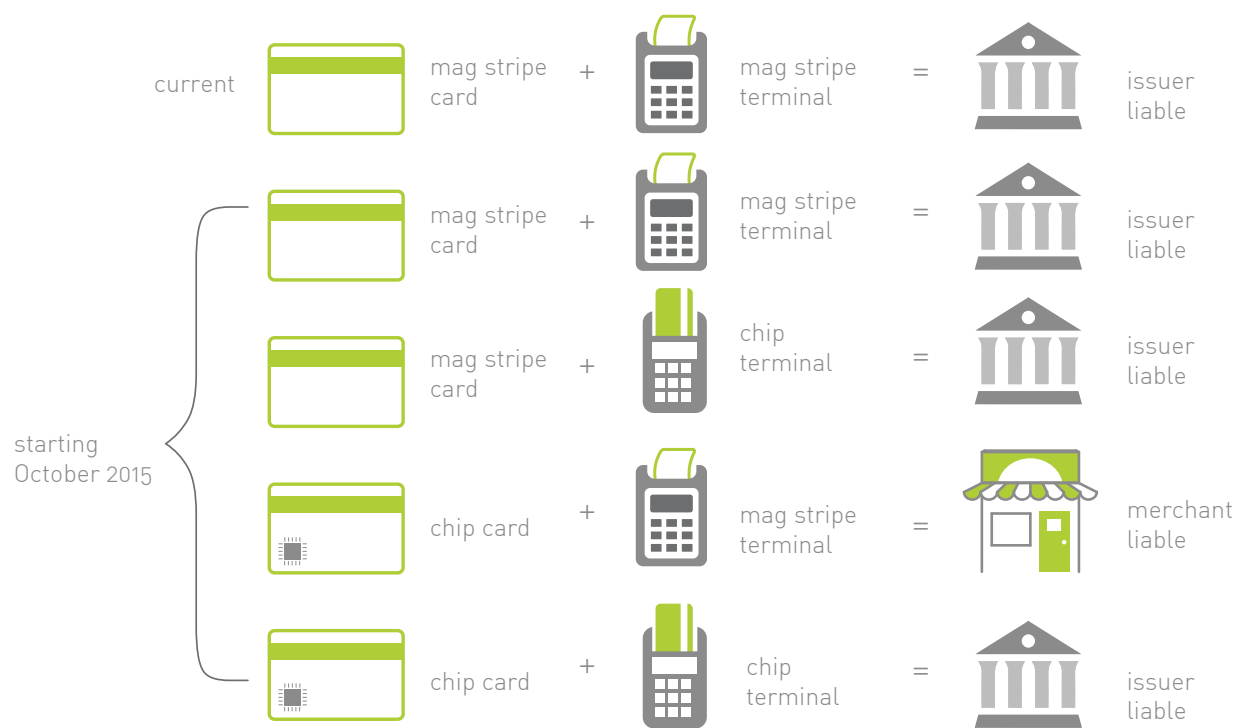
You may have already heard of EMV, especially if you have traveled outside of the United States recently. EMV is the acronym for Europay, MasterCard, and Visa which were the original credit card companies that decided to increase the security of personal information, such as bank account numbers, during credit card transactions. The most recent implementation to heighten security was replacing the swipeable magnetic stripe cards used in the US today with cards containing microchips. "Chipped" cards have a microchip similar to those used in NFC devices. Chipped cards are placed inside a reader rather than swiped. Payments must still be verified by signature or PIN number, similar to debit cards.

While most of the world has already made the EMV switch, the US lags behind. Only US customers will be affected by the October 1st shift in liability for situations involving fraudulent credit card transactions. The rest of this section is particularly directed towards readers in the USA.



The chart below shows which party is considered liable. A good rule of thumb is the party with the older technology is held liable, and in case of a tie, the credit card company is still liable. This might affect you as your current credit card reader probably doesn't accept chipped credit cards. New cards are currently being issued with microchips, but will still come with magnetic stripes. This will allow you to continue accepting payments after October 1, 2015 even if you don't have a chip reader. However, if you haven't updated your credit card reader you may be held liable in credit card fraud situations.

### Counterfeit Card Fraud Liability Examples



\* Information in this graphic courtesy of Heartland Payment Systems. See original graphic here.

## 6: How do I choose the right restaurant POS?

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### Price

Selecting your point of sale system will be one of the last steps in the process of opening your restaurant. POS systems vary widely in their capabilities and cost. Some systems come with large price tags and it is up to you to determine if those systems are worth their cost. Remember, choosing the correct restaurant POS system will increase efficiency and save you a lot of money in the long run.



### Hardware

Whether you're opening a restaurant for the first time or looking to switch POS systems, proper hardware is a necessity. If you're changing systems be sure to ask your new POS provider if your existing hardware will work with the new system. You could potentially save a bundle by repurposing parts of your old system. Give serious thought to the quantity of hardware you'll need. If you're opening a large restaurant in a heavily trafficked area, make sure that you have enough terminals and printers. Anticipate what sort of volume you'll experience and visit similar locations to see what sort of setup they're using and if it seems to work for them.



### Software

The world of computers and software is constantly improving and the restaurant POS industry is no different. When deciding on a system make sure you ask about software upgrades to see if they are included in the price or will need to be purchased. Tablet based POS companies that release their systems through an "App Store" usually offer upgrades to their system for free, while the more traditional models often charge hefty fees to upgrade their system. These costs can sometimes be as large as the original amount paid when first signing up.



## Learning Your System

Making sure your employees are properly trained on your POS system is key. When used properly, restaurant POS systems can be a major source of savings for your business. Just as important is making sure that you are getting the most out of your system. Sales and inventory reports can help cut costs and increase efficiency.



## Processing

As important as selecting a reliable food supplier is choosing the correct payment processor. With few exceptions, the percentage of each transaction that you are paying them can be negotiated and this can lead to major cost savings. There are multiple processing options so make sure you are shopping around for the best rate possible.