



12 Morgan
Irvine, CA 92618
800.551.7674



Installation Requirements

Sold To (Client)	Site Name
Company Name: _____	Site Name: _____
Address: _____	Address: _____
Address: _____	Address: _____
City/State/Zip: _____, CA	City/State/Zip: _____

General: The purpose of this document is to provide the necessary information required for site preparation and setup of the POSitouch POS system. This document describes the proper power lines and communication cables needed for the implementation of the system.

Environmental: Operation Temperature: 32 degrees to 100 degrees Fahrenheit - Operation Humidity 35 to 85 percent relative humidity
All POSitouch hardware should be used in a clean environment. It should be noted that floppy disk units are more sensitive to dust and dirt than other POSitouch components. Special care should be taken to ensure that the environment around such devices is kept as clean as possible. Equipment locations should not be exposed to direct sunlight, should have good ventilation and should NOT be located near heating elements (i.e. incandescent lamps, fluorescent lights and/or heaters).

POWER REQUIREMENTS - Dedicated Isolated Power Supply:

A dedicated - isolated power supply, independent of the power supplies for other electrical equipment, should be installed. It is required that an exclusive (**dedicated and isolated**) power source be established for POSitouch and peripherals, which are connected via transmission cable in the system configuration. A typical way of achieving an exclusive (dedicated and isolated) power source is to derive a power supply for the system from the building's main panel and provide an exclusive sub-panel and circuit breaker for the POSitouch equipment. The receptacles (outlets) should be labeled "For POS Use Only" to avoid accidental connection of other electrical dedicated power lines.

All electrical wiring for the POSitouch system should be in "home run" from the POSitouch Panel to each receptacle. No other electrical circuits may be run in the same conduit as the dedicated wiring for POSitouch.

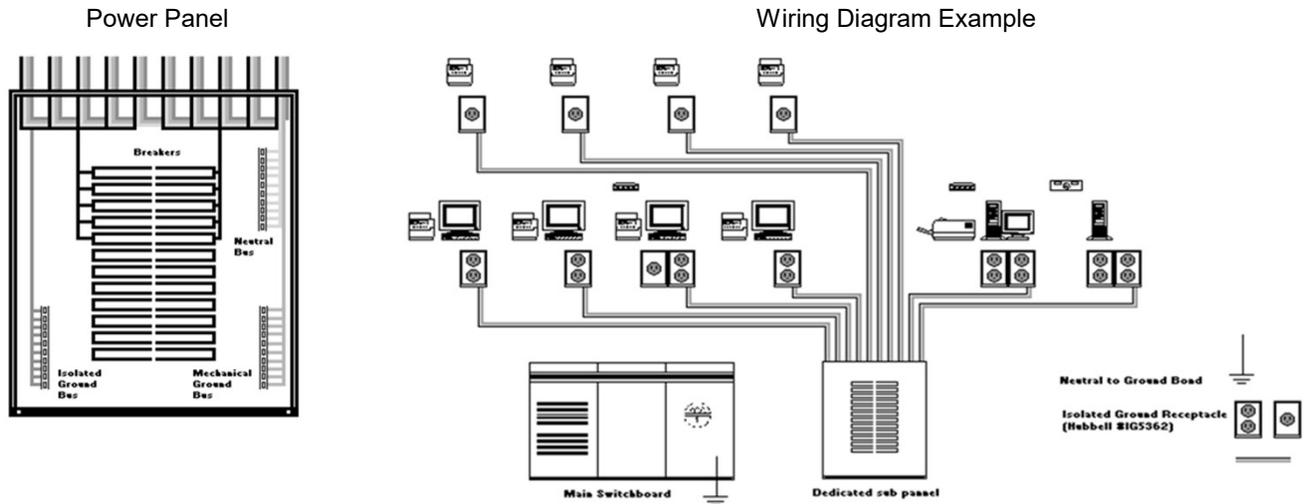
Electrical Isolation: A separate isolated Ground Bar is **required** for POSitouch. A separate isolated Neutral Bar is recommended, as well. All receptacles (outlets) used with the POSitouch equipment **MUST** be grounded at the main panel by a third wire interconnection of the ground terminal of each outlet. The third wire ground should be isolated from any metal members of the electrical system such as conduit, ducts and water pipes. Therefore, only isolated ground outlet receptacles (Hubbell Type, Plug #IG 8362OS) should be used for the POSitouch POS system. Remote printers require a simplex type outlet and work stations a 2 or 4-plex type, depending on the number of outlets required at each electrical connection.

IBM Terminal	1 outlet
J2 Terminal	1 outlet
Credit Card Modem	1 outlet
Backoffice PC	3 outlets total (2+1)
Remote Printer	single outlet
Hub	single outlet
Prep Video	1 outlet

A dedicated phone line is required for the support modem located at the back office computer. This support phone line should be terminated within 6-feet of the back office PC. A second dedicated phone line is required for the credit card modem also to be located in the back office.

CBS, Inc. will assist you to ensure compliance. As such, a diagram of your electrical and cabling requirements may be furnished to you and your electrician, if necessary. In most cases the power supply for the POS system should be installed from the main power distribution panel. A dedicated power distributor board should be mounted. If electrical interference is expected to be high, the power should be drawn from the building's main power supply.

POWER DISTRIBUTION DIAGRAMS



Plugs and Sockets:

Each Socket in the dedicated circuit should be labeled stating that it is for the specific use of the POS system ONLY, to avoid accidental connection of other devices.

Three Phase Power Supply:

If a 115 V Power Supply is taken from a 3-phase, 3 wire 200V or 220 V supply, the phase of the POS system should be separate from the high current devices, so that a balanced load is maintained. In addition, ground is made at the neutral side of the secondary power supply.

Lightning Protection:

The power unit should be equipped with protection against lightning in the following cases: 1) only the primary side has been fitted with lightning protection, 2) the primary power supply is located on or near the roof, 3) lightning is likely to occur frequently, 4) the power line is prone to significant voltage variation, and 5) the supply for the secondary power unit comes through the building.

Grounding:

It is recommended to conform to local grounding standards. All receptacles (outlets) used with the POSitouch system MUST be grounded at the main panel by a third wire interconnection to the ground terminal at each outlet. The third wire ground should be isolated from any metal member of the building such as conduit, ducts, and water pipes.

Types of Power:

The following shows the current need for each device:

Voltage Type		
Voltage		115 Volts +/- 10%
Frequency		50/60 Mhz
IBM Terminal		2.0 amps
J2 Terminal		2.0 amps
Backoffice Computer		5.8 amps
Backoffice Printer		2.0 amps
Receipt Printer or Remote Printer		.65 amps

Other Precautions:

As the power supply may be prone to voltage drops, especially at the far end of the cable, the voltage in the cable should be confirmed after the connection. Avoid incorrect wiring of the 3 core cables, as this could lead to serious damage of the equipment. Be sure to use the power supply cable provided with each piece of equipment.

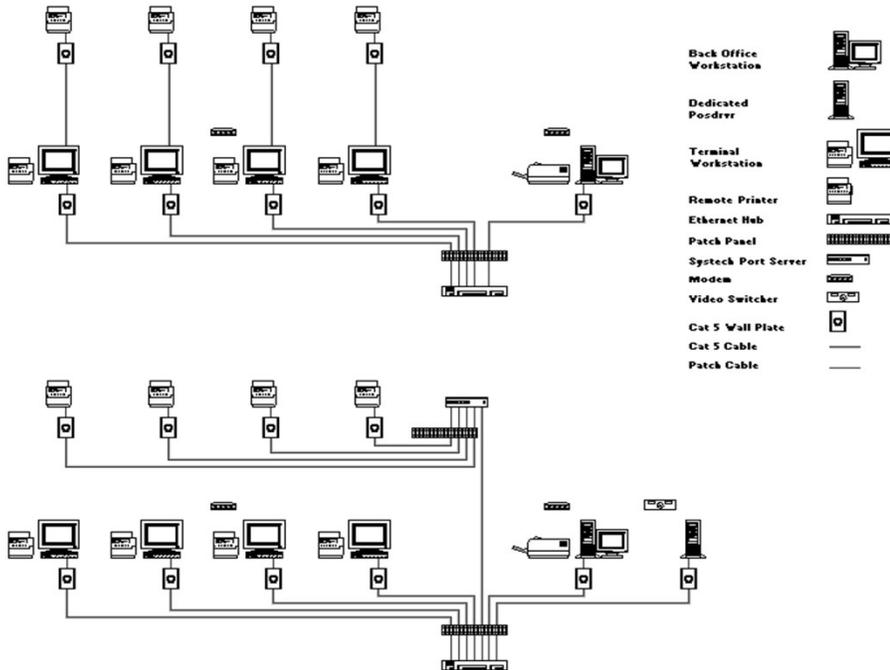
POWER CABLE WIRING CHECK

Voltage will be measured at each of the following points for each terminal/printer/hardware receptacle:

Neutral-----	Live	115VAC
Live (Hot)-----	Grounding Wire	115VAC
Neutral-----	Grounding Wire	0VAC

When the voltage between Neutral and the grounding side exceeds **1 VAC**, be sure to check wiring work on the distribution board.

COMMUNICATION CABLE DIAGRAMS



Terminal Communications: Category 5 Type E cable (grounded, shielded, four pair, and in conduit) in a home run configuration with all communication cable running to a central point (typically into the back office) is required. There will be one cable per terminal. Do not run multiple cables in a single conduit. Cat 5 cables can never be curved in less than a 90 degree rounded elbow method. Both ends of the cables must be terminated with RJ-45 type female receptacles. The terminal-side cable termination should have a Cat 5 type E mounted wall plate located within 6-feet of the terminal.

Cat 5 Type E cable can not be crimped. Never use staples. Never wrap a Cat 5 cable in a shoestring fashion. A circular wrap is okay, however careful consideration should be given to tie wraps. Tie wraps should never be so tight as to cause any indentation to the cable. If the location has 6 or more terminals a Punch Down block is recommended.

Remote Printer Communication Cables: (Cat 5 E) - There should be one cable per printer run from the nearest terminal (in conduit) to the location of the printer. When a Systech box is used for remote printers, the cables must run in conduit, from the remote printer to the Systech box. One cable for each of the remote printers to be used.

Local Printer Communications: Communication is driven from one of the serial ports on the terminal to the printer. This printer will only print information from the local terminal. One cable per local printer (supplied with purchase of the printer and the terminal).

You must be sign EITHER part A or B for power/installation requirements. In addition, you must sign part C - PCI Compliance Acknowledgement.

Agreement A:

I understand both the electrical and communication wiring requirements as outlined in this document. I will provide CBS with a store equipped with wiring meeting these specifications. If I have questions or I am unclear on any subject I will contact CBS at (800) 551-7674 or I will fax my questions to (949) 380-7644.

Sign _____ Date _____

Agreement B: WARNING - YOU MAY BE VOIDING YOUR WARRANTY

I have read the preceding documentation and I am choosing NOT to bring my store to these specifications. I understand that failure to comply with these specifications as listed in this document will VOID all warranty or maintenance agreements potentially delaying my setup and services performed will become COD.

Sign _____ Date _____

PCI Compliance Acknowledgement

Agreement C: WARNING - YOU MAY NOT BE PCI COMPLIANT

I understand that CBS has provided me with information about PCI requirements and referrals to companies providing PCI compliance management services. I further understand that all PCI requirements and compliance are the responsibility of the undersigned. I understand the inherent risk of not contracting with a third party compliance provider.

Sign _____ Date _____