

Introduction Table of Contents

INTRODUCTION AND OVERVIEW.....	1
BASIC SYSTEM OPERATIONS.....	1
PHYSICAL OPERATING ENVIRONMENT REQUIREMENTS....	1
Electricity and Spikes	1
Static.	2
Temperature:.	2
Shock and Vibration:.....	2
Dust and Particulate Matter:.	2
STORAGE AND MEMORY.	3
POWER FAILURES: DATA LOSS AND PROCEDURE.	4
PROGRAMMING CONVENTIONS.	4
KEYBOARD PROMPTS.	4
<ESC> <ESC>.....	5
KEYBOARD INPUT AND FIELDS.....	5
<F1> Home Left.	6
<F2> Home Right.....	6
<F3> Insert Key.	6
<F4> Delete.	6
<F5> Erase.	6
<F6> Restore.....	6
<F8> LOGOFF.....	6
DEFAULTS AND DOLLAR SIGNS.	7
LINE PRINTER.....	7
ERROR MESSAGES.	8
SYSTEM START UP.	9
CMOS SETUP.....	9
DATE AND TIME.....	10
IPL (INITIAL PROGRAM LOAD).	10
BOOT-UP WITH TERMINALS.....	10
LOGON NAME SECURITY.	11
LOGGING ON.....	11
ENVIRONMENTS.	12
MENU ORIENTED CONTROL.....	13
MAIN SYSTEM MENU.....	14

INTRODUCTION AND OVERVIEW

BASIC SYSTEM OPERATIONS

Before we begin to analyze specific software applications, we must first look at the basic hardware and software components of the computer.

Definitions:

** Hardware includes all the mechanical and physical devices such as; the Computer and all its components, the Keyboard, Monitor, Printer, Cables, etc.*

** The Software is all the programming that is put into the computer to enable it to perform the desired functions. When you type in data into the computer you are NOT programming it, you are inputting data. Everything you enter into the system is DATA, everything that comes with the system prior to your input is SOFTWARE and OPERATING SYSTEM.*

PHYSICAL OPERATING ENVIRONMENT REQUIREMENTS

Electricity and Spikes

Most quality micro computer systems, such as the IBM PC, XT, AT, 286, 386, 486 family, simply require standard grounded household current 120 volt AC power. No special power service is usually required. The computer will operate in a range from approximately 105 to 125 volts without any perceivable loss of performance.

The computers have built into them a very sophisticated power supply with ample protection devices to guard against most strong power transients or power spikes. However, the computer **MUST** be plugged into a grounded plug, with a three pronged plug for the ground.

USE OF A POWER PLUG WITHOUT PROPER GROUND MAY VOID ALL WARRANTIES OF YOUR EQUIPMENT.

Of all micro-computer hardware problems, perhaps the majority have been caused by inadequate computer grounding. It is always a wise investment to have a certified electrician (preferably someone with computer installation experience) to make certain that the computer has a good ground for its power supply. It is also very desirable to have a dedicated power line for the computer ... that is a power line with NO other electrical appliances connected. If a fax machine, copy machine, space heater, circulation fan, or other electrical appliance that switches on and off is hooked into the same circuit, you have an excellent chance of having damaging spikes being concentrated on your computer.

Computer hookups in buildings with more than one electrical service, separate panels that are not grounded together, and installations where the ground line is NOT attached to a copper grounding stake are all too common examples of problem-causing situations. Spikes are glitches in the electricity that sometimes exceed several hundred thousand volts and last literally for a millionth of a second. These aberrations in the quality of power can jumble the computer's RAM memory and cause the system to freeze right in the middle of program operation. This can be prevented most of the time with a special **spike** or **surge protector** which clips off the spikes before they even reach the computer. Inexpensive surge suppressors (less than \$20.00 - usually) are actually more harmful to computer systems than having no suppressor. These cheaper models actually convert a

voltage surge into an amperage surge, which will cause a higher rate of damage to the system. Contact your local power company or your Dealer prior to purchasing an inexpensive surge suppressor.

Static

Static electricity is the result of having two varying degrees of electric potential come into contact with each other. The most common example is walking across a carpeted room and touching a doorknob, achieving a static discharge or shock. Static electricity does not need to be strong enough for you to feel to be a problem for the computer.

A remedy for the problem of static is to take a liquid fabric softener and mix it with 5 parts of water to 1 part of fabric softener and spray this solution on the floor or on the person's clothing that may be operating the computer, anytime there is a suspected static electricity. There is no scientific way of determining how much or how often; just keep applying until the static problems are gone.

A good test to do if you suspect static electricity is to touch something that will "ground" you like a file cabinet, door knob, or light switch, if there is a shock, static is present and there is a definite need to utilize the fabric softener. This is a sure way of testing for static; however, another way is to pay attention to the screen of your monitor or terminal as extra dust will accumulate on the front of the picture tube from static electricity. Also, anytime you have vacuumed the areas around your computer you should always re-spray the fabric softener.

Temperature:

As a rule of thumb it is said that if you are comfortable, your computer is comfortable. Most micro chips are designed to operate in temperatures from 60° up to about 100° fahrenheit. It is absolutely certain that a cold computer will not run as perfectly as one that is up to room temperature.

If you are in an environment where the heat is left off in the room overnight and the ambient temperature will drop below 60°, turn on the computer and let it warm up first before attempting to use it. There is evidence that some hard disk machines will not power up properly the first time when the ambient temperature is below 60°.

Do not place your computer in direct sunlight or near a heat register, normally the maximum temperature for your computer is 100°.

Shock and Vibration:

A major component of the computer system is the hard disk which is a very sensitive device that has extremely small tolerances for shock and vibration. An impact exceeding 20 G's will void virtually any warranty of any hard disk system. While it is very difficult to exactly identify what 20 G's feels like (without a special meter), suffice to say that a fist banging on the table or a drawer slamming shut will create difficulties.

Don't place your computer system on top of a desk or filing cabinet where the opening and closing of drawers may cause vibration!

There is a procedure to lock the hard disk into a position that protects it from damage when moving the computer or transferring it to another location. This works much like locking the arm of a phonograph system by moving it off to the side and putting a clamp on it. Using the 'BYE' Logon Name will electronically do the same thing for the hard disk; this will be explained in detail later.

Dust and Particulate Matter:

As a general rule, smoke, from a cigarette or industrial smoke, can be more dangerous to the computer than dust, although obviously it is wise to minimize both in an operating environment. Smoke on the other hand has a tendency to cling to the

computer boards that are installed inside the computer box. The tars, a major component of smokes, will collect and stick to the components and often collect to the point of being able to conduct electricity, of course, this could short out or make the performance of certain boards erratic in a heavy smoking environment.

In addition, the smoke particles can adhere to the physical areas of the diskettes and therefore, gum up the heads that read the diskettes making data transfers from the diskette to the computer extremely erratic. Dust is most likely to damage the physical recording media of the floppy diskettes more than it will the internal components of the computer.

Although anything carried to an extreme can generate disastrous consequences. It is a wise move to make sure that your working environment is as clean from dust and particulate smoke products as is possible.

STORAGE AND MEMORY

The computer has two types of storage: Permanent and Non-Permanent. Non-permanent (or volatile) storage refers to the internal working memory, Random Access Memory (or RAM). This is inside the computer and is used temporarily for storage of data and is what the computer uses as a scratch pad for manipulating data. This storage area or RAM is totally volatile with the electricity, when the power is off the memory goes away and nothing is retained during a power failure.

RAM is measured in 'K' or 'megs' ... a 'K' is actually 1024 while a 'megabyte' is 1000K. Therefore a 640K computer has 640 times 1024 bytes = 65,535 storage locations. **StockBoy** requires a 640K computer for one user, 1024K for two or three users, 2048K (or two meg) for up to six users ... on the average. Extra RAM can be put to good use for speeding up program access and printer output; and since RAM is not proportionally very expensive, we recommend a two meg machine for most **StockBoy** applications.

Permanent storage refers to three major types: floppy disk, hard disk, and tape. Compact Disks are also becoming more popular, but at present represent Read Only...data cannot be stored on them by the end-user.

The floppy diskettes are semi-permanent storage devices that function much like cassette tape. They are flat plastic disks coated with a metal oxide that is able to magnetically read and record data from the disk drives inside the computer. **StockBoy** can use either the 3.5" or the 5.25" high density drive.

When you insert the diskette into the disk drive make sure that the label is up (if 5.25" then the Write Protect Notch is on the left side of the disk). When you insert the 5.25" diskette into the drive, there is a little handle that will turn to bring the read/write heads down on the diskette medium and latch the diskette in place --- with 3.5" diskettes there is a spring-action self loading and ejecting mechanism.

The data stored on floppy diskettes is permanent, but is subject to damage and data loss by mis-handling. Avoid all magnetic contact with floppies! Watch out for magnetic screwdrivers, paper clips, 'refrigerator door' magnets, and electrical devices that generate magnetic fields such as motors, generators, and television monitors. Floppy diskettes are also susceptible to scratching, folding, and bending so they should be handled with care. Diskettes that are used carefully on a daily basis will usually need replacing in about a year.

The hard disk is an enclosure that contains several metal disks with magnetic media that are sealed in a nitrogen environment that is totally 100% dust and smoke particulate free. The advantage of the hard disk is its extreme speed, usually hundreds of times faster than floppy disk access.

The storage size is also much larger and can now vary from 100 megabytes all the way up to millions of megabytes. The permanent storage disks, such as the floppy diskette and the hard disk are not dependent upon power to maintain data integrity. When the power is off they hold the information waiting for the next time that the machine is turned on.

Here is an example of how these concepts of storage and memory are brought to bear with a particular program: When you are working on information on the screen, like inputting the master file for an Accounts Receivable. As you type it is stored in the computer's working memory (RAM) the volatile part of the computer. After you have entered the information that you want to keep for your file, you will then accept the data to let the computer know that you want to save this information to Disk.

Once this information is saved by the computer, which is done automatically in these programs, this information is forever on this disk and cannot be erased except by programmers or by you changing (editing) a particular piece of data. If the power should go off before you accept the data and before saving it to the hard disk, then you will have to re-input that information. Once it is saved to the disk it becomes permanent.

POWER FAILURES: DATA LOSS AND PROCEDURE

Power failures are a reasonable concern of every installation. The RAM is totally volatile to a power failure. Data that was being worked on and manipulated in the RAM at the time of the power failure is lost. However, all data that was stored to the hard disk is permanent. The question becomes: what did the computer write to hard disk and what didn't it?

The FIRST STEP to take in the event of a power failure is to turn off the computer (power down) so that the operator can control when the power comes back on. Quite frequently, in a power failure situation, the power will go off and then fluctuate on and off again; this is **DAMAGING** to your computer's power supply.

The SECOND STEP is to remember what you were doing at the point of the power failure so that you can relay this information when you call Customer Support. If a terminal was inactive at PLEASE LOGON or 'stopped' on a program menu, the odds are excellent that NO DATA (for that terminal) was affected by a power failure.

If you were in the middle of a process that was updating data to the hard disk, it is possible that a portion of your data was written and a portion was not ... you might have a situation that will involve Customer Support.

PROGRAMMING CONVENTIONS

KEYBOARD PROMPTS

Throughout these programs and these manuals you will notice references to different keys on the keyboard surrounded by <> (the less than, greater than sign). You see this throughout the manual and on the screen to indicate a single keystroke. For example <ESC> means press the Escape Key, not E, S, and C. This applies to the <HOME>, <CTRL>, and <ALT> keys. Anytime the <> brackets are used it applies to the direct use of that keystroke to type in the answer. When the computer is asking for an exact response the prompt will look something like this:

Do You Wish to Continue ? <Y> or <N>

The only two answers that it will accept is either a Y or an N anything else will cause the computer to beep at you and re-ask the question. On certain important questions such as:

Continue with End of Year Update ? <YES>

it will require you to type in 'YES' or 'NO' instead of the single letter. This reduces the chance of an operator pressing a Y or an N out of habit. These prompts usually are used to approve the deletion or erasure of data.

Note: The input from the operator via the keyboard is in high intensity video (brighter) and the prompting and descriptive information is in a regular intensity video. This can be controlled by the control knobs on the screen to the point of being visible or completely invisible.

<ESC> <ESC>

Pressing the Escape Key twice is known as the Panic Button. <ESC> <ESC> will allow you to get out of the particular part of the program that you are working in and return you to a spot where you can select an option to leave the program normally. Some program sections will NOT allow this Escape Sequence and a message will appear on the screen, "ESCAPE NOT ALLOWED HERE." This happens when the procedure you're in would generate corrupted data if it allowed you to exit 'in the middle.'

KEYBOARD INPUT AND FIELDS

All keyboard input in the **StockBoy** system is done with a routine that is very similar to a one-line word processing program. When the computer is requesting input it will display a prompting message on the screen centered near the lower line of the video display.

The prompting message will be followed by an input field of highlighted reverse video; e.g. if you have an amber monitor this will be an area of yellow with black letters instead of a black background with yellow letters. The maximum allowable numbers of characters is determined and shown graphically to you by the length of this input field. This shows the maximum length and shorter inputs are certainly permissible. As you type, the letters, numbers, or symbols that you are typing will appear in the reverse video field at the cursor (the blinking underline character) location.

There are inputs that are very frequent and involve the entering of a single number or character. An example of this are the menu items 1 - 9. The input field, in this instance, is surrounded by []. Input fields containing these brackets MAY NOT require the use of the <ENTER> key to accept the input. This function is controlled by an option in System Utilities, LOGON Name Maintenance. If you have your software switch set to require <ENTER> after one character prompts, then you must press <ENTER> to have the system accept your typing. If you have the switch set to NOT require <ENTER> after one character prompts, you need only press the one character and the computer will accept your input.

When the input field maximum is longer than one, you will NOT see the brackets, and you WILL have to terminate your input by using the <ENTER> key. The terms <RETURN> or <ENTER> or <CR> for carriage return, are used interchangeably and refer to the same keystroke.

During the input, you have access to some special keys that will help control and manipulate the data that you are inputting into the system. There are at least ten function keys on a standard IBM family keyboard, and each of them have a specific use during keyboard inputs. Although their uses may be re-assigned depending upon the section or module you are operating in, the following conventions hold true for most programs **EXCEPT the SALES SCREEN:**

F 1	F 2
Home Left	Home Right
F 3:	F 4:
Insert Txt	Delete Txt
F 5:	F 6:
Erase Right	Restore
F 7:	F 8:
	LOGOFF
F 9:	F 10:

<F1> Home Left (will instantly take the cursor to the extreme left of the input field area.)

<F2> Home Right (will instantly take the cursor to the end of the typing that you have in the input area. Sometimes the right hand side of the input field contains spaces and the <F2> key will place the cursor clear at the right side of the input field area.)

<F3> Insert Key (this key is a toggle key: Push it once and it is ON, Push it again it is OFF. When Insert is ON, all input is placed at the cursor and existing text is NOT overwritten ... it is pushed to the right. If inserting causes existing text to be 'pushed off the right edge' that text is lost. With insert OFF, your typing appears at the cursor, and any existing text at the cursor position is overwritten.

<F4> Delete (the character directly above the cursor will be deleted and if the key is held down it will delete anything to the right until released.)

<F5> Erase (erases from cursor position to the end of the input field area. If you are at the far left of the input field area this will blank out the entire input field area.)

<F6> Restore (this will restore the default of the input area to the way it was when you first received the prompt.)

<F7> No special function assigned. At Main System Menu will initiate prompt to start a macro.

<F8> LOGOFF. When an individual program allows it, pressing this key will route the user directly to PLEASE LOGON. This is identical to pressing <CTRL> <G>. There are many places throughout the **StockBoy** software that the <F8> key will simply 'beep' ... this indicates that the routine must be completed before an exit is allowed.

<F9> No special function assigned.

<F10> No special function assigned.

<F11> "NO"

<F12> "YES"

The backspace key generates a destructive backspace function; the cursor deletes the character to the immediate left and moves one space to the left.

DEFAULTS AND DOLLAR SIGNS

During certain keyboard inputs the computer already has an answer in mind. It will display that answer in the input field area automatically before you begin typing. If this is the right answer, you may keep that information simply by pressing the <ENTER> key. This is known as the DEFAULT ANSWER.

In some questions such as DO YOU WISH TO PRINT <Y> OR <N> the answer Y is most commonly used so it may your DEFAULT ANSWER, accept it by pressing <ENTER>. You will get the same results as if you had manually typed in the Y for the Yes answer. You can change the default by typing over it. The default that appears in the input field area can easily be edited by the use of the function keys that are discussed in this section.

On any input prompt, your first character typed will erase the default as though you had pushed the <F5> key. If you wish to EDIT an existing default answer, you MUST move the cursor with the right arrow key to the proper position BEFORE you type any characters...otherwise the default will be erased. Remember that you can always restore the default by pressing <F6> at any time.

If a dollar sign appears at the left of an input field, the computer is expecting (and will ONLY accept) a legitimate numerical input. This means no letters A-Z and no special keyboard characters (the ones appearing on the top row of the standard QWERTY keyboard). The input WILL allow a '-' to show a negative number and WILL allow a '.' to show a decimal point. It WILL NOT allow a comma, dollar sign, asterisk, or diagonal.

If no dollar sign appears at the left, the input will accept virtually any keystroke; however, remember that certain prompts require certain types of answers and that the system may reject your input after it is evaluated. You'll know the computer doesn't like your answer if you hear a beep and the default is restored to the screen.

PREPARE LINE PRINTER

Another standard programming feature of the Software is that prior to any output from the computer to the printer a standardized message will appear and flash at the bottom of the screen:

Prepare Line Printer - then select printer number to use

This is simply a message to remind you to make sure the line printer is ready to print; the paper is in, the power is on, the ribbon is adequate for the job you have initiated, and that the printer itself is on line. Seeing this message does *not* indicate a problem; it is going to appear every single time that the printer is going to be used. It is simply used to alert you so that you can prepare the printer in advance of receiving an Error Message to tell you that something wasn't ready.

Under newer versions of the software, you will select which printer number the report is going to use .. so your appropriate answer may be '1' '2' or '3'. The default for this prompt is controlled by each operator in their Logon Name Maintenance section.

ERROR MESSAGES

These messages will appear at the bottom of the screen with information such as **"MESSAGE # XX at LINE XXXXX. CONTACT CUSTOMER SUPPORT IMMEDIATELY."**

These messages may not necessarily indicate a crisis, they may simply be sending a message to the operator of things that may occur at a later date such as filling up disk space or having particular components that are not quite ready. Anytime that one of these error messages occur it should be *written down*, with a note about the place in the programming that you were in and what you were in the process of doing. You should contact Customer Support IMMEDIATELY even though pressing <ENTER> will route you back to the Main System Menu and you'll appear to be able to continue on with operations just fine.

Another type of message involves a problem with the computer hardware, most generally the hard or floppy disk drive. In this rare event you might see, **"Disk A Data transfer Error at sector xxxxx"** or **"Disk S Sector Not Found at sector xxxxx"**.

Disk "A" is your floppy disk, Disk "S" is your hard drive. Floppy errors occur during the formatting process or during an archive (making a safety copy of data from the hard drive to the floppy). Disk "S" errors can occur at any time.

Floppy errors are usually NOT critical ... you most likely have a defective floppy diskette or perhaps a foreign material has attached itself to the diskette surface. *You must re-do whatever procedure you were working on.* It is NOT safe to proceed with a floppy diskette error; odds are good that the disk is not going to be useable later on. We recommend that you re-format the floppy diskette ... if you see errors during the format then throw the diskette away.

An error on the hard drive "S" is **VERY SIGNIFICANT** (and very, very, very rare). It means that one small spot on the hard drive is defective or is becoming defective. Write down the sector number and press <ENTER> to instruct the system to try to read the sector again. If the computer can read the data on the second try, the error message will go away and your computer operation will continue unaffected ... if the read attempt fails again you will get the message back on your screen. Try a dozen <ENTER>'s before contacting customer support.

Do not turn off the power to the computer while it is 'stuck' on a disk "S" error!

There are means of determining what data might be affected by a disk "S" error. The data can almost always be moved to a safe area on the hard drive, and the bad area can be 'locked out' from further use by a process known as Sector Sparing. All this can be handled over the phone with Customer Service personnel.

SYSTEM START UP

When the power is turned on, the computer has to perform a series of tasks before the software can be used. When the machine is powered up it goes through an automatic self-diagnostic routine, which is explained in your owner's manual, of the particular hardware you are operating. Usually the internal memory is checked. After a series of diagnostic checks, the operating system is loaded into the memory for working automatically from the fixed disk.

If the diagnostics detect a problem, the boot-up routine will be stopped. This is rare. If it does occur, there are several places the boot-up can stop, depending on what type of problem was detected. Please note the last displayed message on the screen, leave the computer on, then call your Support Staff.

A floppy diskette should never be inserted or left in the drive during system power up unless specifically requested by the Support Staff. If a diskette is left in the machine, the system will attempt to execute any program on the floppy disk ... since your **StockBoy** system resides on your hard disk, you may never get access to it with a floppy disk involved.

Diagnostic - Boot Disk: The software allows you to build your own Boot Disk, which is a trouble-shooting diagnostic tool that might be required from time to time. If Customer Support indicates that you have a need to use this diskette, it must be inserted in the floppy drive prior to power up.

CMOS SETUP

What is it? All 286, 386, 486 and newer type computers use a CMOS setup procedure for storing information about the hardware components. CMOS (complimentary metal oxide semiconductor) is a technical term for the type of chip that stays 'alive' without AC power. Usually a battery pack or rechargeable NICAD battery is provided with the computer to keep the CMOS active when the power is turned off.

The CMOS stores critical information such as:

- 1) running Time and Date
- 2) number and type of floppy disk drives
- 3) number and type of hard disk drives
- 4) amount of conventional and extended memory (RAM)
- 5) type of video adapter and monitor

All computer store the above information; many newer models also store additional information regarding: math co-processor chips, keyboards, power-up speed, RAM shadowing, bus-speed, wait states, power on diagnostics, etc.

How do I use it? During the power-on self test, a screen message will appear that will instruct you on how to access the computer's built-in software to setup the CMOS data; this is usually by pressing the key or a function key or by pressing <CTRL><ALT><S> at the same time. This is usually the **ONLY** place you can access the CMOS setup routine ... it cannot be accessed from the **StockBoy** software. Each computer may be different, and each computer will display on the screen how to access the CMOS setup.

If your internal battery dies or becomes disconnected and the CMOS may lose all or part of the data, the power-on self test will alert you, and most likely you will be **FORCED** to access the CMOS setup routine. The setup is built in to the computer, it is **NOT** a part of **StockBoy**.

The setup routine will give you on-screen instructions on how to input the data and how to save it. Usually you are asked to select the proper field by using the arrow keys and/or pageup-pagedn keys.

What is the correct information? Customer Support will provide you with a list of the proper CMOS information during installation ... do NOT lose the list! It's a simple matter to re-input the correct data if the CMOS should lose power.

When do I use it? If the CMOS has incorrect information due to a power loss or a static shock, the power-up self test will alert you that you need to run the CMOS setup utility. If you encounter boot-up problems or floppy disk drive failure, it is always a good idea to re-boot the system and check out the CMOS data.

DATE AND TIME

The internal date/time clock-calendar is contained in the CMOS. If your date and time are way off when you boot the machine in the morning, it is possible that the CMOS battery is weak. You can change the date and time of the CMOS by using the setup utility, or the **StockBoy** Master System Maintenance section can also put the correct date and time in the CMOS.

If you need to input the time information manually, keep in mind that it is based on military time i.e. 1:00 p.m. is shown as 13:00. Also when you enter the time you must separate the hours, minutes, seconds (if you choose to use seconds) with either spaces or colons. Date input requires month - day - year numbers to be separated with spaces or "/" diagonals.

Correct date and time are *ABSOLUTELY ESSENTIAL* to the operation of the software. All data files are stamped with the latest date and time; all reports are shown with the date and time. Incorrect setting of the clock can result in serious problems for the operator ... the computer doesn't care what day it is, but the people who run it will always run into trouble with incorrectly dated information.

IPL (INITIAL PROGRAM LOAD)

This is the software portion of the system that takes over automatically following the power-up self test. The IPL is responsible for conducting hard disk diagnostics one time each day during the first boot-up of the day. The IPL sets up the configuration of the system by establishing print spooler and starting all terminals .. it is 100% automatic and requires (nor allows) operator input.

When the IPL is successful the main computer console displays, "PLEASE LOGON".

BOOT-UP WITH TERMINALS

If your system is a multi-user installation (with more than one screen), then each of your terminals must be configured properly and powered on PRIOR to the computer boot-up process. During the IPL (Initial Program Load), the screen will display the message, "Starting terminal ..." At this point, the initialization signals are sent from the computer to each terminal in your system. If the terminals are NOT powered on when the initialization codes are sent, the terminal will not receive the codes and certain functions at the terminal may not work! Symptoms of this situation include, garbage on the screen, F1-F12 function keys not working properly, clicking sound when each key is struck, or extra 'status' lines on the screen.

In addition, failure to have the terminal properly ready for use will SLOW THE ENTIRE SYSTEM DOWN!!! If, for example, the power to the terminal is off, the computer will be trying to send "Please Logon" down the data cable several times a second ... thus wasting a lot of computer power!

The terminal must be configured properly to match specific settings so that it may 'talk' with the computer. There are four critical settings: BAUD RATE, HANDSHAKING, WORD LENGTH, and STOP BITS. These four settings must be identical for both the terminal and the computer. StockBoy ALWAYS uses a word length of 8 and stop bits of 1 ... these settings cannot be changed in the software. The baud rate and handshaking refer to the speed of transmission and the method of controlling the transmission between a terminal and a computer. These settings are established in the Hardware Configuration section of the

StockBoy software (see MASTER SYSTEM MAINTENANCE reference manual) with menu options 8-4-1 from the Main System Menu. StockBoy default settings (recommended) are baud 38,400 and handshaking 'DTR'.

Setting the baud rate and handshaking on the terminal will vary based on the brand of terminal. Your hardware dealer can certainly show you how to access these settings on your particular brand of terminal. Most StockBoy installations utilize the WYSE brand of terminal ... accessing the baud rate and handshake is performed by pressing <SHIFT> and <SELECT> at the same time, then pressing <F4> to access the communications screen.

It is important to remember that virtually any setting can be used as long as the settings are identical between the terminal and the computer.

LOGON NAME SECURITY

Logon Please:

The PLEASE LOGON screen is the 'locked door' to the **StockBoy** system. Without a proper LOGON name and password to serve as the 'key', you cannot advance beyond this point in the programming. The system is, for all practical purposes, doing NOTHING when it is at PLEASE LOGON. If all workstations are resting at this screen, the computer is idle ... it is therefore not susceptible to power failures, data loss, or unauthorized access.

StockBoy, using the true multi-user THEOS operating system, is NOT subject to 'viruses' or computer hackers who may be wizards at MS-DOS or UNIX. Without a valid LOGON name and password, it is NOT possible to access the computer. *This measure of security can be very comforting to those merchants who have 30,000 SKU's loaded into the system and worry about a disgruntled employee getting into the system and erasing all the data!*

The authors have built in a special SYSTEM LEVEL ACCESS code that allows their programmers to access the operating system directly. This code changes daily. The system level access code is a series of letters and numbers that is input at the PLEASE LOGON prompt ... any use of this code is recorded for the benefit of the system's owner and can be seen in the System History printout. There is no possibility of undetectable usage.

LOGGING ON

When the screen reads PLEASE LOGON, you are, in fact, LOGGED OFF. This is THE safe place to leave your screen unattended. If you walk away from your workstation, *anyone* can pick up where you left off, UNLESS you leave the screen at PLEASE LOGON.

Various LOGON names can be set up by your system manager via Master System Maintenance, LOGON Name Maintenance. Each LOGON name is assigned various levels of access which enables the person to execute programs in several pre-defined areas of the software. Each person creates and maintains his own password ... it is advisable to change your password periodically.

For additional information on LOGON names, see Master System Maintenance, LOGON Name Maintenance.

Certain LOGON Names may have 'macro' programs associated with them, at the option of your system manager. A macro is a small program that is simply a set of pre-recorded keystrokes that get 'played back'

when the name logs on. Macro's can be programmed to do any function automatically without operator intervention.

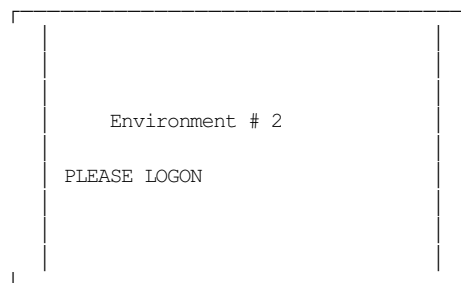
ENVIRONMENTS

StockBoy has the capacity to control up to 100 different environments. An environment is, in effect, a separate storage area for data files on the hard disk ... data from one environment can never be mixed up with data from another. This feature allows multiple businesses (or major divisions within one business) to run on the same computer using the same software.

Environments are completely independent of one another; a chart of accounts on one environment has nothing to do with a chart of accounts in another environment, for example. There is no means to combine, mix, merge, or handle as a group, the data in different environments.

Environments are numbered for identification .. the main environment as delivered is number '0', the largest environment number is '99'. You can establish any numbered environment on your system subject to hard disk storage availability.

To access another environment (or to create one the first time), you simply enter the environment number at the PLEASE LOGON prompt. If you input a '2' ... the screen will show:

A screenshot of a computer screen showing a login prompt. The screen is enclosed in a rectangular border. Inside the border, the text "Environment # 2" is centered. Below it, the text "PLEASE LOGON" is centered. The screen is otherwise blank.

Remember that the LOGON names, the passwords, ALL DATA is completely different from one environment to the next!

If you inadvertently press a '2' during the PLEASE LOGON prompt, and the environment #2 does not exist, the system will prompt you, "Create New Environment #2 ? <YES>". Be sure to answer this question correctly ... establishing a new environment that you will not use may take up valuable storage on your hard drive.

Because environments are identified with numbers, your LOGON name MUST begin with a letter.

StockBoy is menu-oriented; all available options are organized on each menu screen. There are no hidden 'pull-down menus' no difficult CTRL key functions or complex series of keystrokes that need to be input to tell the computer which action to perform; all that an operator need do is to select which option is desired with a single keystroke.

```

graph TD
    A[MAIN SYSTEM MENU] --> B[STOCKBOY BOOKKEEPING]
    A --> C[STOCKBOY INVENTORY]
    A --> D[STOCKBOY PURCHASING]
    B --> B1[other]
    B --> B2[other]
    C --> C1[other]
    C --> C2[other]
    D --> D1[other]
    D --> D2[other]
  
```

StockBoy does not use a 'mouse' or other computer pointing device. Because the vast majority of all input is done via the keyboard, a mouse becomes cumbersome to use .. you would first have to point to a screen area using the mouse, then place your hands on the keyboard to input the data! Keeping your hands on the keyboard home keys at all times is the fastest method for 'real-business' data input.

StockBoy Introduction Reference Manual - Page 13

MAIN SYSTEM MENU

<u>MAIN SYSTEM MENU</u>
1. Inventory
2. Purchasing
3. Sales
4. Bookkeeping
5. Payroll
6. Custom Features
7. System Utilities
8. Master System Maintenance
9. LOGOFF

The MAIN SYSTEM MENU is your central branching point. Following the input of a proper logon name and password, the program will direct the operator automatically to the Main System Menu. All secondary menus will branch back to here. The exact options on the Menu are totally installation dependent and will be discussed in detail by the Customer Support team at the time of installation.

There are two options on the Main System Menu that are common to virtually all installations. Usually option number 8 is the Master System Maintenance and number 7 is the System Utilities.

Number 9 is always LOGOFF. The terms 'logging off' and 'return to PLEASE LOGON' mean the same thing. The <F8> key can be used in many programs to return to PLEASE LOGON without the need of stepping back through a series of menus to reach option #9 here.

INTRODUCTION INDEX

<esc>.....	4, 5	password.....	11, 14
<f1>.....	6	permanent storage.....	3, 4
<f2>.....	6	please logon.....	4, 6, 10-12, 14
<f3>.....	6	power failures.....	4, 11
<f4>.....	6, 11	prepare line printer.....	7
<f5>.....	6, 7	print spooler.....	10
<f6>.....	6, 7	re-boot.....	10
archive.....	8	restore.....	6, 7
balance sheet.....	13	reverse video.....	5
boot disk.....	9	sales screen.....	5
CMOS.....	9, 10	sector not found.....	8
configuration.....	10, 11	setup.....	9, 10
cursor.....	5-7	shock.....	2, 10
customer support.....	4, 8-10, 14	spikes.....	1
diagnostics.....	9, 10	spooler.....	10
disk drive.....	3, 8, 10	static.....	2, 10
diskettes.....	3	surge protector.....	1
dos.....	11	system history.....	11
dust.....	2, 3	system manager.....	11
environment.....	1-3, 12	system utilities.....	5, 14
error message.....	7, 8	temperature.....	2
escape.....	4, 5	terminal.....	2, 4, 10, 11
fixed disk.....	9	theos.....	11
floppy disk.....	3, 8-10	time clock.....	10
format.....	8	transients.....	1
formatting.....	8	update.....	5
handshaking.....	10, 11	vibration.....	2
hard disk.....	2-4, 9, 10, 12	void.....	1, 2
hard disk storage.....	12	warranty.....	2
hardware configuration.....	11	word processing.....	5
history.....	11		
initialization.....	10		
input field.....	5-7		
inventory.....	13, 14		
iopl.....	10		
ledger.....	13		
location.....	2, 5		
logoff.....	6, 14		
logon.....	2, 4-7, 10-14		
logon name.....	2, 5, 7, 11-14		
logon name maintenance.....	5, 7, 11, 13		
macro.....	11		
magnetic media.....	3		
master system maintenance.....	10, 11, 14		
memory.....	1, 3, 4, 9		
menu.....	4, 5, 8, 11, 13, 14		
merge.....	12		
message.....	5, 7-10		
operating system.....	1, 9, 11		