

**FieldGo<sup>TM</sup>**  
**PCATX-N9 SERIES**  
**PORTABLE WORKSTATION**

**USER'S GUIDE**

## FieldGo Portable Workstation User's Guide

---

No part of this document may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Broadax Systems, Inc.

Information in this manual has been carefully checked and is believed to be accurate. Broadax Systems, Inc. assumes no responsibility for any infringements of patents or other rights of third parties which may result from its use.

Broadax Systems, Inc. assumes no responsibility for any inaccuracies that may be contained in this document. Broadax Systems, Inc. reserves the right to make improvements to this document and/or product at any time and without notice.

**Copyright © 1999, Broadax Systems, Inc. All rights reserved.**

# Contents

<b>Chapter 1 Introduction .....</b>	<b>1</b>
About This User's Guide .....	2
<b>Chapter 2 Installation .....</b>	<b>3</b>
Before You Start .....	3
Important Safety Instructions .....	3
Where To Get Help .....	5
Unpacking Your FieldGo Workstation .....	6
Setup At A Glance .....	7
System Components .....	9
<b>Chapter 3 Starting Your System .....</b>	<b>13</b>
LCD Adjustments .....	14
Audio Adjustments .....	16
Touchpad Configuration .....	16
<b>Chapter 4 Adding Components .....</b>	<b>17</b>
Opening The System .....	18
Installing Add-on Cards .....	20
Installing Internal Drives .....	22
Installing Or Removing 5.25" Drives .....	23
Installing Or Removing 3.5" Drives .....	24
Installing A Drive In The Hidden Drive Bay .....	25
<b>Chapter 5 Care and Maintenance .....</b>	<b>27</b>
Proper Care For Your Flat Panel LCD .....	27
Cleaning The Intake Fan Filter .....	28
<b>Appendix A Service And Warranty .....</b>	<b>29</b>
<b>Appendix B Technical Specifications .....</b>	<b>32</b>

This page left blank intentionally

# Chapter 1

## Introduction

Welcome to your BSI (Broadax Systems, Inc.) FieldGo portable workstation. Your FieldGo workstation is one of the new members of an entire family of portable computers and workstations designed by BSI.

Founded in 1986, BSI is one of the pioneers in the portable computer industry. BSI started by producing a transportable PC with an integrated monochrome CRT display. In 1987, BSI introduced its first flat panel portable PC-AT system with a back-lit super-twisted monochrome LCD. It represented BSI's successful effort in reducing the overall size and weight of a portable PC, while retaining all the expansion capacities of a desktop computer. Since then, BSI has continued to expand to the current lines we now have.

Your FieldGo workstation is designed to provide the full power of a desktop computer, and the ability to use standard add-on cards in a portable package. It features five drive bays, a crisp, bright flat panel LCD, detachable keyboard, touchpad pointing device, mouse port, dual stereo speakers, dual cooling fans, up to 300W power supply, and a carrying case.

Combining cutting-edge processors and peripherals, FieldGo sets a new standard for portable computational power by delivering performance, versatile system configuration, high level of expandability, and reliability that can ultimately increase your productivity.

# About This User's Guide

This is your guide to setting up, adding new components, and diagnosing your workstation. You'll also find contact information here.

This guide tells you how to:

- ♦ Setup and start your workstation.
- ♦ Fine tune your flat panel LCD for best image quality.
- ♦ Add new expansion cards and drives.
- ♦ Care for your workstation.

This guide, however, contains no information regarding configuration of your add-on cards or additional drives. Refer to the setup information for those devices to complete your installation.

Your FieldGo workstation can be configured with a dual processor capable motherboard. If you initially purchased a single processor in a dual-processor capable system, BSI recommends that when you decide to add a secondary processor, you do so with professional assistance from BSI.

## Chapter 2

# Getting Started

### Before You Start

Before you unpack and start using your FieldGo workstation, please take a few minutes to read these first few pages to prevent problems from arising due to shipping damages, missing items, or possible misuse of the workstation.

### Important Safety Instructions

Before using your workstation, read the following safety instructions to make sure you use the workstation safely and effectively:

- ♦ Always check your power supply input voltage selector switch before connecting the AC power cord to the workstation. It's a two position switch that sets the power supply for 115V or 230V AC input voltage. See Fig. [2] for location of the selector switch.
- ♦ Use your workstation on a stable surface.
- ♦ Always disconnect the power cord from the workstation before making any hardware installation. Be sure both the system and the external devices are turned OFF. Sudden surges of power could damage sensitive components.

- ◆ Before installing internal add-on cards or components, always ground yourself first to prevent static electricity from damaging the components. You can touch the metal housing of the power supply to discharge any electrostatic charge on your body, or use a grounding wrist strap attached to the chassis. Leave all electronic components in their antistatic containers until you're ready to install them.
- ◆ Do not block or cover the cooling fan openings on the left-rear and on the right-hand side of the workstation chassis. The filtered intake fan on the right-hand side and the power supply exhaust fan at the back of the chassis work in a push-pull fashion to provide efficient ventilation for the internal components.
- ◆ Do not drop the chassis! Prevent any sharp or hard objects from hitting the LCD panel! The LCD panel is made of glass that can easily crack if dropped.
- ◆ Occasionally you may want to clean or dust off the external chassis and the LCD panel. Turn OFF the system power and disconnect the power cord before cleaning. Clean the chassis using a cloth only. Do not spray any liquid cleaner directly onto the screen.
- ◆ Do not open the system's back cover except for adding or removing expansion cards or drives. Except as specifically explained in this User's Guide, do not attempt to service the workstation yourself, this may void your warranty.
- ◆ Before transporting your workstation, be sure the LCD panel is pushed back into the chassis recess. Unplug the keyboard and touchpad cable and properly tuck it away in its storage space. Securely lock the keyboard in place.



## Where To Get Help

BSI provides technical assistance through online support and telephone services during regular work hours.

The following lists contact information:

Corporate headquarters contact information:

Broadax Systems, Inc.  
9440 Telstar Ave., Suite 4  
El Monte, CA 91731  
(626)442-0020 (voice)  
(626)442-4527 (fax)  
E-mail: [info@bsicomputer.com](mailto:info@bsicomputer.com)  
On the web: [www.bsicomputer.com](http://www.bsicomputer.com)

Technical support contact information:

Phone support is available Monday through Friday, from 8:30 AM to 5:30 PM Pacific time.

Tech support phone number: (626)442-7038  
Tech Support fax number: (626)442-9024  
Tech support e-mail: [support@bsicomputer.com](mailto:support@bsicomputer.com)

Before calling:

- ♦ Make a note of the BSI serial number(s) found on your workstation. They help our support staff quickly identify the exact item you have. If you have your invoice with you, write down the invoice number too.
- ♦ Write down exactly what occurred, including the configuration of your system and exact nature of the problem. Have this information ready when you call tech support.

## Unpacking Your FieldGo Workstation

Your FieldGo workstation is shipped in a corrugated paper carton with the workstation in its soft carrying case.

- ◆ Remove all packing materials from the workstation.
- ◆ Check for damage during shipping while unpacking the workstation. If you notice any damage, notify the shipper to report the damage. Then notify BSI customer service.
- ◆ The LCD panel is covered with a clear plastic protective film. Carefully peel it off before you start your workstation.
- ◆ Save all packing materials in case you want to transport it in the future.

You should find the following items:

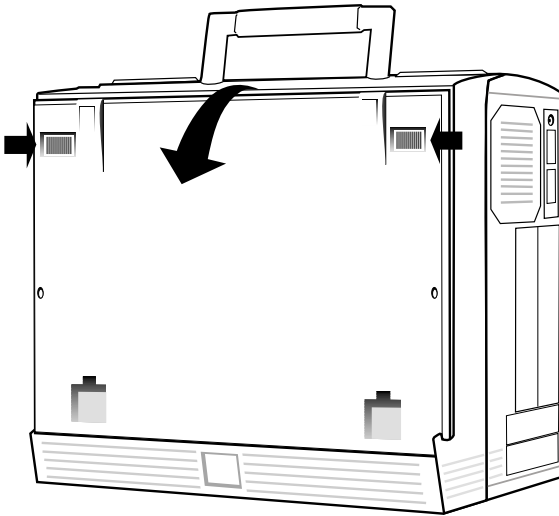
- ◆ FieldGo workstation.
- ◆ Carrying case with telescopic handle and wheels.
- ◆ Power cord.
- ◆ Hardware User's Guide.
- ◆ Any software that you may have purchased with the system.

## Setup At A Glance

Take a moment to familiarize yourself with the various components and external controls/connectors of your workstation with the help of the following illustrations.

Your FieldGo workstation is an all-in-one portable computer with a detachable keyboard and flat panel LCD. The keyboard is securely attached to the chassis by two latches.

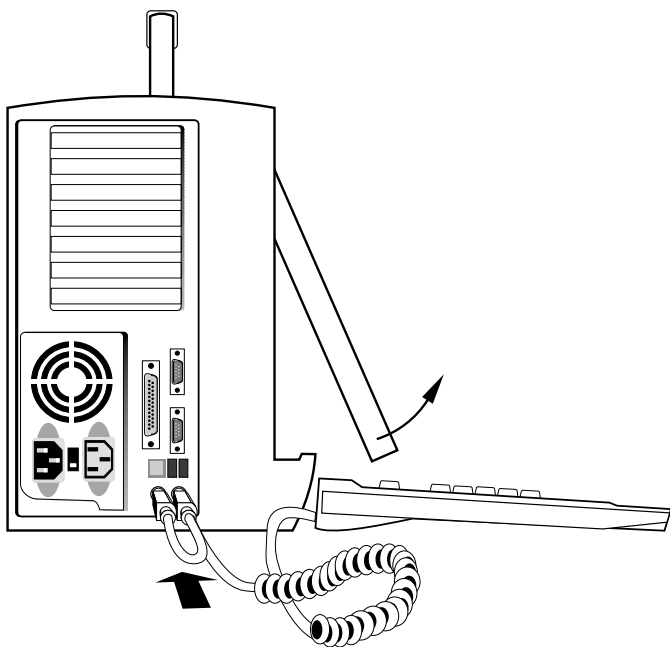
- ♦ Set your workstation on a flat and stable surface so you can detach and lay down the keyboard. Since two internal fans are used to keep the system cool during operation, you should leave enough space around the unit to allow adequate airflow through the system.



*Fig.[1] Setting up the FieldGo workstation*

- ♦ Face the chassis as shown and release the keyboard from the chassis by sliding both latches towards the center as indicated by the arrows.

- ◆ Tilt the keyboard away from the chassis and set it down on your work surface.
- ◆ Pull out the keyboard/touchpad combo cable from its storage space in the keyboard.
- ◆ Plug in the connectors exactly as shown. Both keyboard and touchpad connectors are identical mini-DIN 6-pin connectors. The cable ends first at the keyboard connector. The touchpad connector is daisy-chained to the keyboard connector located at the end of the cable.

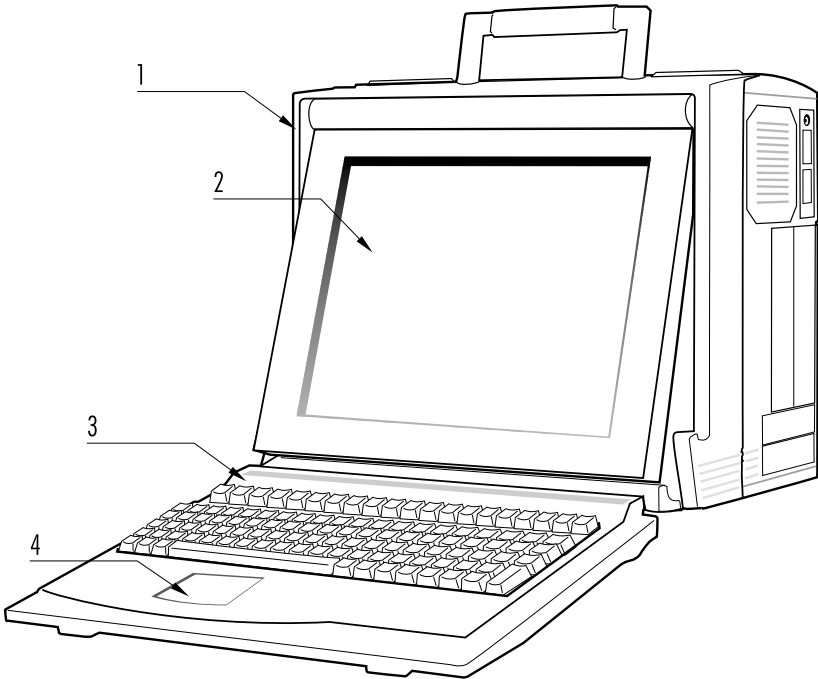


*Fig.[2] Connecting the keyboard and touchpad.*

- ◆ Check the voltage switch below the power supply fan on the left side of the system to make sure it's set to the appropriate voltage setting for your power outlet. Plug in your AC power cord.

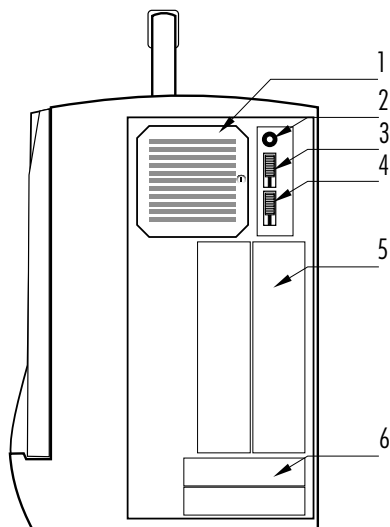
## System Components

The following illustrations will help you identify the main parts of your FieldGo portable workstation.



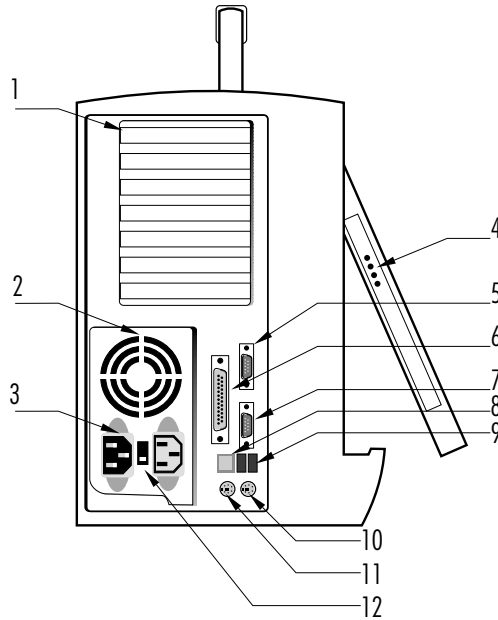
*Fig.[3] Main system components.*

1. *Chassis.*
2. *Active matrix LCD.*
3. *102-key keyboard with wrist-rest.*
4. *Touchpad mouse.*



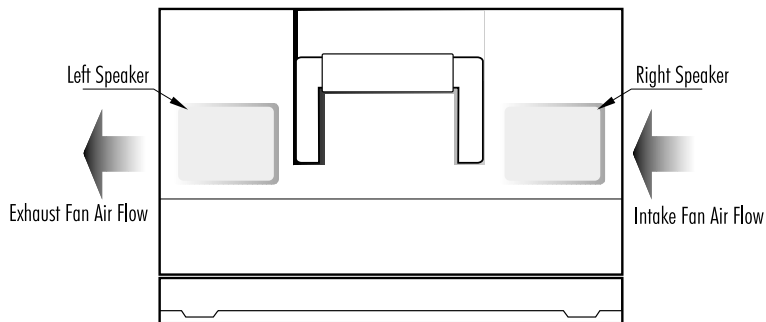
*Fig.[4] Right-side view of your FieldGo portable workstation:*

- 1. Filtered intake fan.*
- 2. System reset button.*
- 3. Audio tone control.*
- 4. Audio volume control.*
- 5. 5.25" half-height drive bays.*
- 6. 3.5" half-height drive bays.*



*Fig.[5] Left-side view of your FieldGo portable workstation:*

1. Add-on card expansion slot covers.
2. Power supply, exhaust fan.
3. AC input connector.
4. LCD display adjustment controls.
5. Serial communication port.
6. Parallel printer port.
7. Serial communication port.
8. Power on/off switch.
9. Universal Serial Bus connectors.
10. Mini-DIN PS/2 keyboard connector.
11. Mini-DIN PS/2 mouse connector.
12. Input voltage selector switch.



*Fig.[6] Top view of your FieldGo portable workstation.*



## Chapter 3

# Starting Your System

Before you turn on your system, observing the following steps will prevent any startup problems.

1. Make sure the input voltage selector switch on the power supply is set correctly to either 115V or 230V depending on your local outlet voltage.
2. Make sure the video-out connector is securely attached to the video card.
3. Connect the keyboard and touchpad connectors according to Fig. [2].
4. Plug in the AC power cord. You are now ready to turn on your system.
5. Press the power on/off switch. The system will automatically start. If an operating system is already installed, your workstation should boot to the operating system's startup screen.

The following sections tell you how to fine tune your LCD display, audio quality, and pointing device.

## LCD Adjustments

Your flat panel display is an active matrix LCD incorporating amorphous silicon thin-film-technology to provide you with a bright, high-contrast color screen. It is capable of displaying true-color (16 million colors) with 1024x768 addressable pixels.

The image is already optimized for many display modes. However, four controls located on the leftside of the LCD panel are available to adjust the following characteristics of your LCD through an OSD (on-screen display) menu:

- ◆ Horizontal (H-Posi) and vertical (V-Posi) screen position: Adjusts the horizontal or vertical image position within the display area of the LCD.
- ◆ Contrast: Adjusts image brightness in relation to the background.
- ◆ R, G, B-Contrast: Adjusts contrast levels for red, green and blue.
- ◆ Brightness: Adjusts overall image quality and background screen brightness.
- ◆ Horizontal size (H-Size): If you select a display mode lower than 1024x768, this control can expand the image up to your LCD's native addressable pixels.
- ◆ Clock delay: LCD controller generates the pixel clock to ensure that the red, green, and blue components of each pixel precisely align with each other as each line is scanned. Adjust this to reduce noise in the video signals that may show as shimmering in the image.
- ◆ Clock phase: Fine adjustment of the pixel clock.
- ◆ C-Temp: Selects a color mode. Four settings are available to set white point reference in terms of color temperature measured in degrees Kelvin. Your LCD is initially set at "USER" setting.
- ◆ Horizontal and vertical sync: Unlike CRTs, regular desktop monitors, which benefit from high refresh rates, LCDs are inherently flicker-free. There is little difference between

45Hz, 60Hz, or 75Hz refresh rates for your LCD. These values are factory set and are not user adjustable.

- ◆ AutoReset: Resets all parameters to factory optimized setting.
- ◆ Luminance: Luminance affects the brightness of the display. This is an on/off toggle switch that sets luminance to 100% or 50%. Lowering the luminance prolongs the lifetime of the LCD backlight.

Follow these steps to activate the on-screen menu and make any adjustments to suit your preference:

1. Turn on the system and wait for about twenty minutes before making any screen adjustments. The LCD needs time to become thermally stable to achieve more accurate results.
2. Press either ▲ or ▼ button to invoke the on-screen menu.

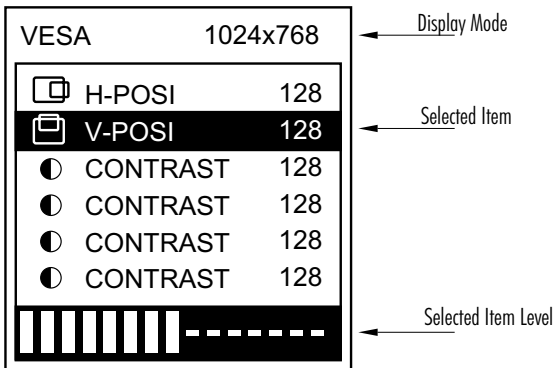


Fig.[7] LCD on-screen display menu.

3. Press either ▲ or ▼ again to step through the options. The selected item will be highlighted.

4. Press either + or - button to modify the highlighted setting. Pressing a button once increases or decreases the numerical setting by a single digit. Holding down a button for more than two seconds increases the rate of change.
5. After you've made your adjustments release the button and wait a few seconds for the on-screen menu to automatically disengage.

## Audio Adjustments

There are two audio controls located on the right-hand side of your workstation. You can adjust the volume and tone of the stereo speaker using the sliders.

If your system comes with a sound card, the stereo speakers are connected to your sound card's line-out socket through a stereo plug. If your system does not include a sound card, the speakers are disconnected. Only mono audio from an internal speaker is available.

If you decide to install a sound card later, be sure to connect the stereo plug to your sound card speaker-out socket. Please refer to your sound card user's guide to properly configure it for your operating system.

## Touchpad Configuration

Your FieldGo keyboard has an integrated touchpad pointing device compatible with the Microsoft PS/2 mouse. Your touchpad is already configured as a PS/2 mouse port pointing device when it leaves BSI. You can further configure your touchpad through the Windows control panel. Refer to your operating system setup guide for more information.

## Chapter 4

# Adding Components

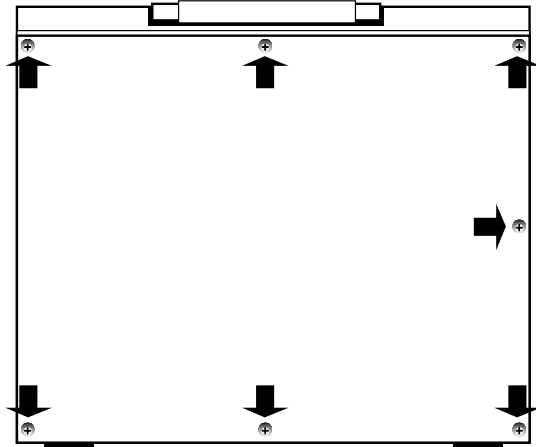
Your FieldGo portable workstation has the unique capability to accept a wide range of industry standard add-on cards. It comes with an AGP slot usually occupied by the graphics card and a combination of ISA and PCI slots depending on the exact configuration of your system.

This section provides you with procedures and illustrations to help you install add-on cards to your system. Before you start, shut down the system, ground yourself and disconnect the AC power cord.

## Opening The System

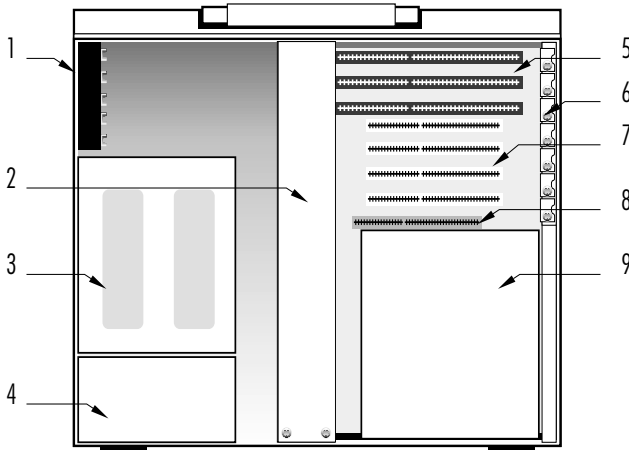
Follow these steps to remove the back cover:

1. Place your workstation on a stable surface.
2. Take off the back cover by first removing all the screws as shown.



*Fig.[8] Removing the back cover.*

Internal system components and layout are illustrated in the following figure. The type of slots available in your system may differ from the illustration. In general, ISA slots are black color and about 6" long. PCI slots are about 3.5" long and are usually white color. AGP slot is brown color and approximately 3" long.



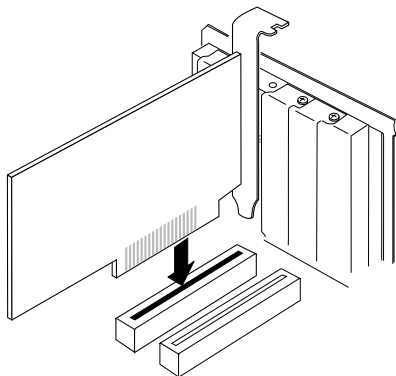
*Fig.[9] FieldGo internal components and layout.*

1. Card edge retainer
2. Card stabilizer hold-down clamp.
3. 5.25" drive bays.
4. 3.5" drive bays.
5. ISA slots.
6. Expansion slot cover.
7. PCI slots.
8. AGP slot.
9. Power supply.

## Installing Add-on Cards

Follow these steps to install add-on cards to your workstation:

1. Remove the card stabilizer. It's a metal strip with adjustable plastic hold-down clamps designed to hold add-on cards securely in their slots. The card stabilizer is attached to the chassis by two screws located at the bottom of the metal strip. Remove the screws and then the card stabilizer.
2. Locate an open slot compatible with your add-on card bus type.
3. Remove the screw that holds the slot cover and then remove the metal slot cover.
4. Hold your card by its edge taking care not to touch the gold-plated edge connectors. Insert the card firmly into the expansion slot.



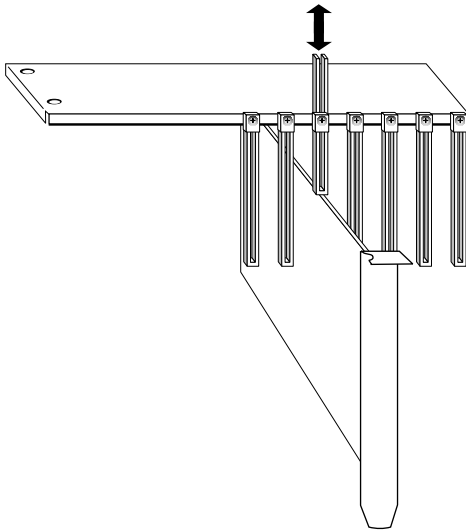
*Fig.[10] Installing add-on cards.*

5. Reinstall the screw.
6. Next, reinstall the card stabilizer, securely holding down your new add-on card in its slot. The plastic hold-down



clamps can be adjusted to accommodate add-on cards of different height.

7. Locate the clamp that will be positioned directly above the add-on card.
8. Loosen the screw so that the plastic clamp can slide freely in its metal bracket.
9. Install the stabilizer on the chassis.
10. Adjust the hold-down clamp so that it comes in contact with the add-on card. Set the clamp by tightening the screw on the bracket.
11. Cut off any excessive part of the plastic clamp.



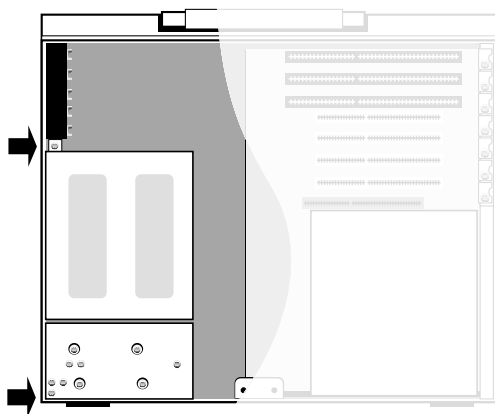
*Fig.[11] Setting the add-on card hold-down clamp.*

# Installing Internal Drives

Your FieldGo workstation has space for five half-height drives. Two 5.25" and two 3.5" drives are externally accessible. One internal drive space accommodates a 3.5" drive.

To begin installing or removing a drive, follow these steps to detach the drive cage from the chassis:

1. Shut down the system and unplug the power cord from the power supply.
2. Set your workstation in its upright position with the back cover facing you.
3. Refer to Fig.[8] and Fig.[9] to first remove the back cover and card stabilizer.
4. Internal space is tight. You'll need to pull out the drive cage to add or remove a drive. Carefully unplug any signal and power cables attached to drives already installed in the system. Make a note of how they were originally connected. Especially note the orientation of the flat ribbon cables.



*Fig.[12] Remove these screws to take out the drive cage.*

5. The drive cage is attached to the chassis by two screws indicated by the arrows in Fig.[12]. Remove the screws.
6. Carefully pull out the entire drive cage assembly towards you.

Internal drives are usually attached to a computer chassis by screws on the side panels of the drives. You can also install most hard drives and removable media drives using screw holes at the bottom of the drives.

In your FieldGo workstation the externally accessible drives are installed in the drive bays using their screw holes on the side panels of the drive housing. To install a fifth drive in the hidden drive bay, your drive housing must have screw holes on the bottom.

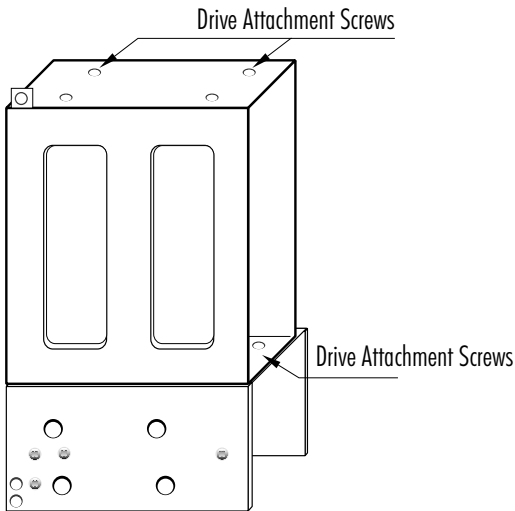
## Installing Or Removing 5.25" Drives

Adding or removing 5.25" drives requires that you first remove all 3.5" drives already installed in the system. This gives you access to the side panel of the 5.25" drive bay bracket that would otherwise be blocked by the 3.5" drives.

Refer to Fig.[13], Fig.[14] and follow these steps to add or remove a 5.25" drive:

1. Assuming that your system already has a 3.5" floppy drive and a 3.5" hard drive installed, remove all "Drive Attachment Screws" as shown in Fig.[13]. Four more screws are located on the opposite side. Remove those too.
2. Slide the 3.5" drives out of the drive bay. Avoid touching the circuit boards.
3. Now that you have access to all screw holes on both side panels of the 5.25" drive bay, you can proceed to install or remove your 5.25" drive.
4. In your FieldGo workstation, 5.25" drives are mounted vertically. If you're installing a drive, first remove any drive bay cover plate.

5. Slide the drive into the drive cage. Secure the drive by inserting and tightening four screws on both side panels.



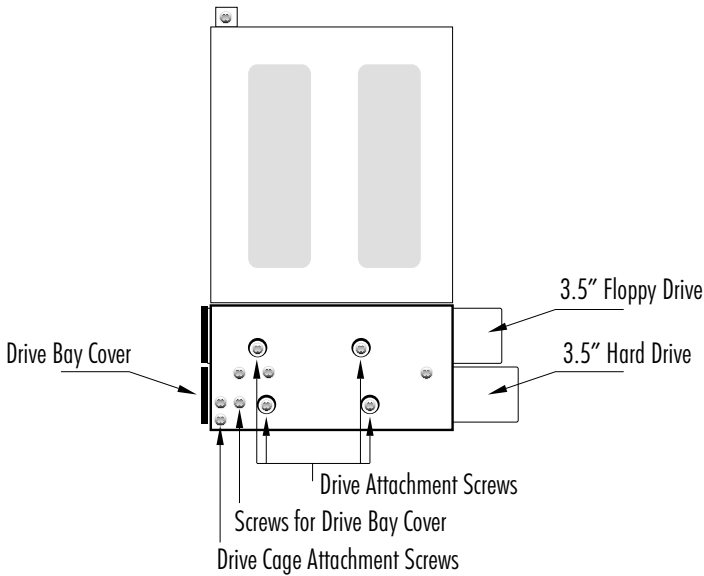
*Fig.[13] Screw holes for 5.25" drives.*

6. Slide the drive cage back into the chassis.
7. Plug in the power connector and signal cable.

## Installing Or Removing 3.5" Drives

Adding or removing a 3.5" drive is straight forward. Just follow the previous procedures in "Installing Internal Drives" and steps 1 and 2 in the previous section for the 5.25" drive installation.

Note that the 3.5" hard drive bay provides vibration damping rubber grommets to shock-mount your hard drive. BSI strongly recommends installing the hard drive in this space.



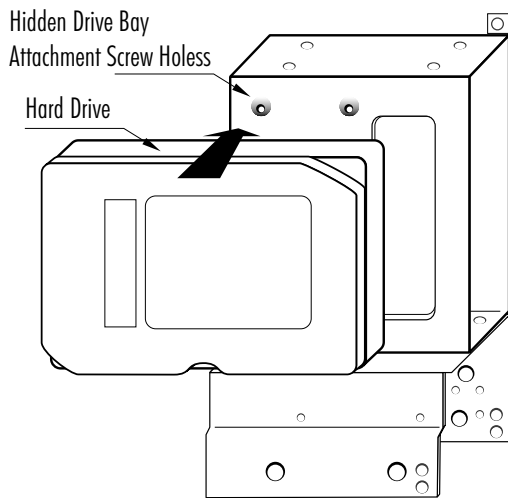
*Fig.[14] 3.5" drive bay closeup.*

## Installing A Drive In The Hidden Drive Bay

Your FieldGo workstation provides an internal drive bay space for a 3.5" drive. This drive is externally inaccessible.

To install a drive in the hidden drive bay, you must first remove all 5.25" drives. The hidden drive bay uses screw holes on the bottom of drive housing to secure the drive to the drive cage. Fig.[15] illustrates how a 3.5" drive is attached to the hidden bay.

1. Remove all 5.25" drives.
2. Align the screw holes of the drive with that of the drive cage.
3. Insert and tighten the screws.



*Fig.[15] Installing drives in the hidden drive bay.*

## Chapter 5

# Care and Maintenance

### Proper Care For Your Flat Panel LCD

The LCD panel is made of glass. It may break or crack by rough handling, excessive pressure, being struck by a hard object or if your system is accidentally dropped.

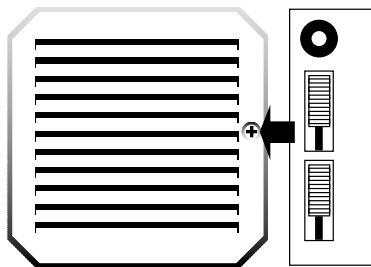
If the LCD panel is soiled or if occasionally you want to wipe off any dust or finger prints from the LCD surface do so with a damp cloth. Never spray cleaning fluids directly onto the LCD surface. Never use solvents or abrasives.

Long contact with water may cause discoloration or spots on the LCD surface. Wipe off water drops immediately.

## Cleaning The Intake Fan Filter

Your workstation has a filtered intake fan providing ventilation for your workstation internal components. The filter prevents air-borne dust particles from entering the chassis. After using your workstation for a period of time dust and lint may accumulate on the filter and block air flow. The filter can be easily removed for cleaning. Follow these steps to clean the fan filter:

1. The fan filter is covered by a removable plastic cover retained by a single screw. Remove the screw and then take off the cover.
2. Take off the filter.
3. Rinse it under cold water.
4. Let the filter dry.
5. Reinstall the filter and the cover plate.



*Fig.[16] Removing the fan filter.*



# Appendix A

## Service And Warranty

### Limited Product Warranty

All hardware products are warranted to be free from manufacturing and material defects for one year from date of purchase. Products that become defective during such period shall be repaired or, at BSI's option, replaced at BSI service center. This warranty is made solely to Purchaser. This limited warranty is contingent upon proper use of the hardware products covered and does not cover products which have been modified or which have been subjected to unusual physical or electrical stress.

BSI's sole obligation (and Purchaser's remedy) in the event of breach of warranty shall be the repair or replacement of defective goods. In no event shall BSI be liable to purchaser or any other party for loss, damage, or injury of any kind arising out of or in connection with these terms and conditions, or any performance or nonperformance under these terms and conditions by Seller, its employees or agents, in excess of the net purchase price of goods and/or services actually delivered and paid for by purchaser. In no event shall BSI be liable for any incidental or consequential damages of any kind, including but not limited to any interruption of service, loss of business, loss of good will or loss of anticipated profits, even if BSI is notified of the possibility of such damages.

BSI, its hardware or software suppliers, make no warranty, express or implied, concerning the applicability of any hardware or software to any specific purpose.

BSI shall not be obligated to repair or replace goods rendered defective, in whole or in part, by causes external to the goods, such as, but not limited to, catastrophe, power failure or transients, over voltage on interfaces, environmental extremes, or use of unauthorized parts.

BSI makes no other express or implied warranty with respect to hardware products other than the limited warranty referred to above. All implied warranties including but not limited to implied warranty of merchantability and fitness for a particular purpose is hereby excluded.

## Disclaimer Of Warranties On All Software

BSI makes no warranties, express or implied, with respect to all software and accompanying manuals and materials, regardless of their source, their quality, performance, merchantability or fitness for any particular purpose. All such items are sold or licensed to Purchaser by BSI on an "AS IS" basis. The entire risk as to their quality and performance is with the Purchaser. Should such software prove defective following their purchase, Purchaser (and not BSI or its suppliers), assumes the entire cost of all necessary service, repair or correction and any incidental or consequential damages resulting from any defect in such software. In no event will BSI or its suppliers be liable for direct, indirect or consequential damages resulting from any defect in any software, even if BSI has been advised of the possibility of such damages.

## Service Policy And Procedures

BSI technical support and service department can be reached at:

Broadax Systems, Inc.

9440 Telstar Ave., No. 4

El Monte, CA 91731

Tech Support Tel:: (626)442-7038

Tech Support Fax: (626)442-9024

Tech Support E-mail: [support@bsicomputer.com](mailto:support@bsicomputer.com)

Hours: 8:30 AM - 5:30 PM PST, Monday - Friday

Call BSI tech support to obtain an RMA number prior to returning any product for service. Always have your invoice and serial number ready when calling tech support. Mark the RMA number on the mailing label and enclose a copy of the invoice with a description of the problem.

Warranty repair covers labor and parts only, customer pays for shipping to and from BSI. Return shipping charges will be COD unless other arrangements are made. For units whose warranty is close to expiration, to get warranty service, unit must arrive at BSI on or before date of invoice. BSI is not responsible for service items abandoned in BSI for over 3 months.

## Out Of Warranty Service

BSI warrants that the parts installed will perform satisfactorily under normal conditions for a period of ninety (90) days. Parts replaced by BSI that become defective during this period shall be repaired, or at BSI's option, replaced free of charge, at BSI's service center. This warranty applies only to parts replaced and does not cover any other part already in the equipment. There is no warranty or guarantee of merchantability, or fitness for a particular purpose, with respect to the services performed or parts furnished by BSI. If repairs later become necessary due to other defective parts, they will be charged separately.

# Appendix B

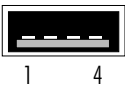
## Technical Specifications

### External Ports Description

This section contains a description of the I/O ports on the FieldGo workstation.

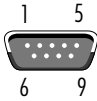
**Table B-1** FieldGo standard ports and connector type.

Port	Connector Type
Serial	DB-9 (male) RS-232
Parallel	DB-25 (female)
Video	Mini DB-15 VGA
USB	4-pin dual USB connectors
Mouse	6-pin Mini-DIN (female)
Keyboard	6-pin Mini-DIN (female)



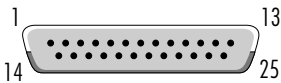
**Table B-2** USB Port pinouts.

Pin	Assignment
1	VCC
2	-Data
3	+Data
4	Ground



**Table B-3 Serial port pinouts.**

Pin	Assignment
1	DCD Data Carrier Detect
2	RD Receive Data
3	TD Transmit Data
4	DTR Data Terminal Ready
5	SG Signal Ground
6	DSR Data Set Ready
7	RTS Request to Send
8	CTS Clear to Send
9	RI Ring Indicator



**Table B-4 Parallel port pinouts.**

Pin	Assignment	Pin	Assignment
1	Strobe	14	AutoFd
2	Data 0	15	Fault
3	Data 1	16	Init
4	Data 2	17	SelectIn
5	Data 3	18	Ground
6	Data 4	19	Ground
7	Data 5	20	Ground
8	Data 6	21	Ground
9	Data 7	22	Ground
10	Ack	23	Ground
11	Busy	24	Ground
12	Error	25	Ground
13	Select		

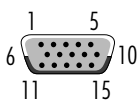


Table B-5 Video port pinouts.

Pin	Assignment
1	Red
2	Green
3	Blue
4	Ground
5	Ground
6	Red Return
7	Green Return
8	Blue Return
9	No Connect
10	Ground
11	Ground
12	IIC Data
13	Horizontal Sync
14	Vertical Sync
15	IIC Clock

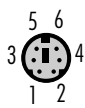


Table B-6 Mouse and keyboard port pinouts.

Pin	Assignment
1	Data
2	Reserved
3	Signal ground
4	Power (+5V)
5	Clock
6	Reserved

## Flat Panel Specifications

Your FieldGo workstation incorporates a TFT (thin film transistor) active matrix color liquid crystal display comprising amorphous silicon TFT attached to each signal electrode, a driving circuit and a backlight. It features:

- ◆ High luminance, Low reflection
- ◆ Wide viewing angle
- ◆ Analog RGB signals
- ◆ Multi-scan function: e.g., XGA, SVGA, VGA, VGA-TEXT, PC-9801, MAC
- ◆ Incorporated edge type backlight (two lamps, inverter)
- ◆ Replaceable lamp holder

---

### Characteristics (model NL10276AC30-03, at room temperature)

---

Display area	304.128(H) x 228.096(V)mm
Drive system	a-Si TFT active matrix
Display colors	full-color
Number of pixels	1024 x 768
Pixel arrangement	RGB vertical stripe
Pixel pitch	0.297(H) x 0.297(V)mm
Module size	350.0(H) x 265.0(V) x 9.7(D)mm
Contrast ratio	200:1(typ., perpendicular)
Best contrast ratio	350:1 (typ., downside 10 <sup>o</sup> )
Viewing angle (more than contrast ratio of 10:1)	Horizontal: 55o (typ., left side, right side) Vertical: 50o (typ., up side), 45o (typ., down side)
Designed viewing direction	Wider viewing angle with contrast ratio: down side (6 o'clock) Wider viewing angle without image reversal: up side (12 o'clock) Optimum grayscale ( $\gamma=2.2$ ): perpendicular

Color gamut	42% (typ., at center, to NTSC)
Response time	15ms (typ.), "white" to "black"
Luminance	200cd/m2 (typ.)
Signal system	Analog RGB signals, synchronous signals (Hsync, Vsync), DCLK
Supply voltage	12V, 12V (logic/LCD driving, backlight)
Backlight	Edge light type: Two cold cathode fluorescent lamps with an inverter
Power consumption	15.6W (typ.)