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BEFORE YOU BEGIN THE SOFTWARE LOAD - CAUTIONS AND WARNINGS

Important: If your system is connected to a Hospital Network, disconnect it before proceeding. Failure to disconnect the SGI computer can corrupt the software load process.

Important: During the Install GUI phase of the software load, be sure the **<Num Lock>** key on the keyboard is turned off. If the <Num Lock> is on, the symptom seen is that nothing will happen when trying to type in any of the edit fields in the Install GUI.

Important: When reconfiguring the system using the Install/Configuration GUI, remember to push the **<Configure>** button on the verify tab before going to the Save info tab and doing a SaveInfo. If you have not done the final configuration by pushing the **<Configure>** button in the Verification tab, the information saved during Save Info will not reflect the latest changes made in the Install GUI.

Important: If at any time during the OS load a problem occurs that causes you to stop the install, correct the problem then reset the computer or power cycle the computer and begin the OS install again from the start. This is necessary to insure a complete load. If this does not fix your problem it may be necessary to do a low level format on the system drives. Refer to Appendix C for this process.

Important: If the site will be using the “YP” networking option, do not turn YP on until after the InSite IIP option has been configured and checked out. If YP is turned on first, it will cause the InSite checkout to fail.

1- LOADING HOST COMPUTER - OVERVIEW & PREPARATION

This procedure covers installing software for the OpenSpeed system. The software is a modification of the 8.3 software, so any references to this release will be applicable.

1-1 Required Media

- IRIX 6.5 Operating System CDROM Set, Disk 1 of 2 and Disk 2 of 2
- IRIX 6.5.4 Boot/Update CDROM (use correct revision)
- MrApps - MR Applications CDROM
- MrpResSrv - MR Restricted Service CDROM *(GE Service use only)*
  or MrpAdvSrv - MR Advanced Service CDROM *(Licensed In-House Customers)*
- saveINFO - MaxOptix MOD Media (Either blank or previously used)

DO NOT PROCEED UNLESS YOU HAVE THIS MEDIA AVAILABLE

1-2 Archive Images

This installation instruction will erase any current images left in the database. **Archive all images BEFORE continuing with this** procedure.

1-3 Required Information Prior To Loading Software

First collect vital site information listed below to insure the install will not be stopped for lack of site specific information (and in case RestoreInfo fails). To collect this info:

1. On the Service Desktop, select **[Install]**; type **operator <Enter>** for the password.

2. Look in **Hardware Configure**, **Network info**, and **System Configure** buttons for current site information. Refer to Appendix A for instructions on how to locate the site information. Record your Site configuration information in Table 1-1.

Note

The "√" in the Table 1-1 indicates what the configuration should be set to for OpenSpeed.

- Unique Internet IP Address for Host (Networked systems only).
- Unique Internet IP address for PC Computer.
- Unique Internet IP Address for Laptop port.
- Netmask
- TPS Subnet ID
- Domain Name
- Hospital Name
- Hostname (Unique name for this system. Name must begin with Alpha character. Beginning the name with a number will cause the system to not come up.).
- Unique ID (from GECARES specific to site)
- Service ID (from GECARES, assigned when first dispatch is opened on system)
- Suite Name: This name should be at least, but no more than 4 characters.
- Network Speed
- Weight Unit

- Field Strength
- Gradient Type
- RF Amp Type
- Coil Type
- Receiver Bandwidth
- System Type (Echospeed, Highspeed, Horizon) *
- Modem Type *
- Camera name *
- DASM type *

* These entries are not found in the Install GUI. They are acquired by physically checking the system.

.

TABLE 1-1
VITAL SITE INFORMATION

ENTRY	VALUE	ENTRY	VALUE
Host IP:		Host ID:	
Netmask:	**(Default is 255.255.252.0)**	Unique ID:	
Domain Name:		Resonator Module:	__ BRM __ CRM √ ORM __ SPRM
IWS PC IP:		RF Amp Type:	__ Tube Type RF PEN II __ 1.0T Teli Solid State RF __ 1.5T Analogic Solid State RF √ 0.7T Analogic Solid State RF __ 0.5T Analogic Solid State RF
FE Laptop IP:		Service ID:	
TPS Subnet IP:		Weight Unit:	
Network Speed:		Field Strength:	__ 0.5T √ 0.7T __1.0T __ 1.5T __ 3.0T __ 4.0T
Host Name:	**(Name can't begin with a number.)**	Gradient Type:	__ 8645 Single or Double Bay √ 8280 SGD Base System __ 8651 SGD HighSlew __ 8915 ACGD
Hospital Name:		Camera Type:	
Suite ID:		DASM Type:	__Digital (LCAM) __Video (VDB)
Package Name:	__ EchoSpeed SR120 __ EchoSpeed SR150 __ EchoSpeed SR190 __ HiSPEED SR77 √ Base (Horizon) SR20 __ SIGNASP SR12	Receiver BW:	__ 62kHz __ 125kHz

IMPORTANT!

IT IS CRITICALLY IMPORTANT TO ENSURE THE CORRECT VALUES ARE ENTERED FOR SYSTEM TYPE, GRADIENT TYPE, FIELD STRENGTH, RF TYPE, AND COIL TYPE BEFORE DOING THE MRAPPS LOAD. THESE VALUES DETERMINE WHAT PROTOCOLS AND COIL CONFIGURATION FILES ARE LOADED.

Check (✔) the Options installed at this Site on the System Options Table 1-2 below. After loading software and doing Restore Info, verify that all the options are still available to the customers. If any keys are missing, reactivate them using the option key floppy, or MOD.

TABLE 1-2
SYSTEM OPTIONS DATA TABLE

	SITE OPTIONS		SITE OPTIONS
	Echo Planar Imaging (not available)		Tagging
	Fast Gradient Echo		Sgdperf
	Cine		DW-EPIEZ
	Fast Spin Echo & FLAIR		iDrive Pro
	Time of Flight		iDrive
	Phase Contrast Vascular Imaging		SmartPrep99 Upgrade
	Research		Probe99 Upgrade
	Proactive Service		Functool
	Research PSD		Voxtool
	Videoconferencing		Interavascular Imaging
	SGD_EchoSpeed		Clariview
	DW EPI		Multislice Multiangle
	FLAIR EPI		
	SPECIAL		
	Smart Prep		
	SSFSE		
	Three Plane Localizer		
	HIS RIS		
	E3D TOF		
	FSE_XL		
	Bloodsupp		
	Fastcine		

1-4 SaveInfo and Saving System Information Entered In The Install GUI

1-4-1 SaveInfo

A SaveInfo should be done before starting the install to save the latest system configuration files, calibration files, and protocols.

1. Insert the your SaveInfo MOD or a new MOD into the drive.

2. From the Service Desktop select **[Install]**. In the Install Tool window, type **operator <Enter>** at the password prompt.

3.
   a. In the Install GUI, select the **Save/Restore** tab.
   b. There are four options: [Save Information], [Save Protocols], [Restore Info], and [Restore Prot]. To save all information, select **[Save Information]**; this saves all system calibration and configuration files, along with customer protocols. The [Save/Restore Protocol] option is intended as a means to quickly save just customer protocols on the same or different MOD.
   c. When SaveInfo is complete, remove the MOD media and write the date on it.

1-4-2 Save GI Configurations

If you are loading software on a system already at 8.3 or 8.4 software, create a GI (Guided Install) configure MOD from the Guided Install File menu.

1. Insert the your normal SaveInfo MOD or a new MOD into the drive.

2. At top left corner of the Install GUI, select **<File>** then **<Save GI Configuration to MOD>**.

Note

The “save to MOD” process does not create a complete SaveInfo disk. It only creates a copy of the information already entered in the GUI tabs for later use to update the GUI tabs during a new install. *(SaveInfo uses the Save/Restore tab.)* The **<Save GI Configuration to MOD>** and SaveInfo can be saved on the same MOD. A separate partition is built for each.

2- HOST OPERATING SYSTEM SOFTWARE LOAD

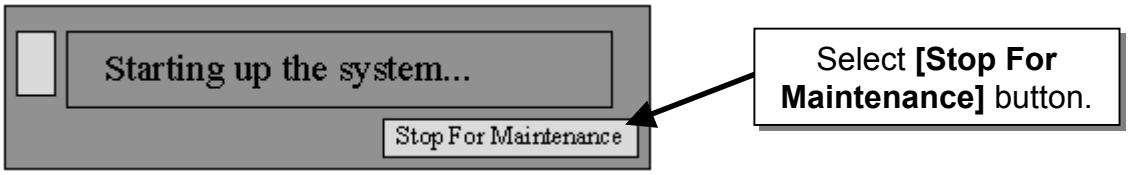
Initial Conditions:

- All images archived (Section 1-2).
- System information recorded (Section 1-3); SaveInfo performed (Section 1-4).
- System disconnected from Hospital Network.

Procedure:

1. If the system is not up and running, switch on power at this time and continue with step 2. If the system is already running, go to the Service Desktop and select **[Shutdown]**. When prompted, click on the **[Restart Button]**.

2. Stop the reboot process; click on the **[Stop For Maintenance]** button when it appears.



3. Click on the **[Enter Command Monitor]** button when it becomes available.

4. Insert the **IRIX** 6.5 CD labeled **"Boot/Update"** into the CDROM Drive on the workstation (right side). On the command line type the following (*user responses are bolded text*):

   Type of the following:

   >> **boot -f dksc(1,3,8)sash64 dksc(1,3,7)stand/fx.64 --x <Enter>**

   `fx: "device-name" = (dksc)` **<Enter>**
   .
   `fx: ctlr# = (0)` **<Enter>**
   .
   `fx: drive# = (1)` **<Enter>**
   .
   `fx>` **r/ro <Enter>**
   .
   `fx/Repartition/RootDrive: Type of Data Partition = (xfs)` **<Enter>**
   .
   `fx> continue?` **yes <Enter>**
   .
   `fx>` **l/sy <Enter>** (This is a lower case L , /, lower case s, and lower case y.)
   .
   `fx>` **exit <Enter>**

5. At this point the system will reboot to the PROM startup screen. Select **[Install System Software]** button. A pop up window opens and asks you where to install from. Choose, [**Local CD-ROM**], select **[Install]**. Then select the **[Continue]** button.

If you are working with newly formatted disk drives or new, never used disk drives, you will be told by the system during this boot that the system was unable to mount the "/root" file system. The system will stop with the statement "press Enter to invoke C shell csh:". If you see this message, type the following:

…press Enter to invoke C shell csh: **<Enter>**
mkfs /dev/dsk/dks0d1s0 (This is /dev/dsk/dks zero d one s zero.)
exit <Enter>

6. The next system message should be "*Trying again to mount /dev/dsk/dks0d1s0 on /root.*" If you get this message, continue with step 7. Otherwise…

If you are working with a newly formatted drive you may get a message similar to:

```
/dev/dsk/dks0d1s0: Invalid argument No valid file system
found on: /dev/dsk/dks0d1s0 This is your system disk:
without it we have nothing on which to install software.
```

Do the following:

```
Make new file system on /dev/dsk/dks0d1s0 [yes/no/sh/help]: yes<Enter>
About to remake (mkfs) file system on: /dev/dsk/dks0d1s0.
This will destroy all data on disk partition: /dev/dsk/dks0d1s0.
Are you sure? [y/n] (n): y<Enter>

Block size of filesystem 512 or 4096 bytes? 512<Enter>
Doing: mkfs -b size=4096 /dev/dsk/dks0d1s0
meta-data=/dev/rdsk/dks0d1s0 isize=256 agcount=8, agsize=128612 blks
data = bsize=4096 blocks=1028895, imaxpct=25
log =internal log bsize=4096 blocks=1000
realtime =none bsize=65536 blocks=0, rtextents=0
Trying again to mount /dev/dsk/dks0d1s0 on /root.
```

7. Continue as follows:
   inst> **sh <Enter>**
   .
   # **mount /CDROM <Enter>**
   .
   # **/CDROM/mr_prep <Enter>**
   .

8. The system will run for about 6 minutes and then will prompt with:

   "Please insert the First OS Disk (Pa) and then press <enter>".

Put the OS CDROM Disk 1 of 2 into the CDROM Drive. Wait for 20 seconds, or until the amber light on the CD Drive stops blinking, then push the **<Enter>** key.

9. After an additional 3-6 minutes, the system will again prompt with:

   "Please Insert the Second OS Disk (Pb), then press <enter>"

   Put the OS CDROM Disk 2 of 2 into the CDROM Drive. Wait for 20 seconds, or until the amber light on the CD Drive stops blinking, then push the **<Enter>** key.

   Loading the rest of the Operating System off the second disk will take about 30 minutes and will not require any user intervention.

10. When finished, the system will stop at the "#" prompt. Type the following to continue.
    .
    # **exit <Enter>** (to exit back to the original inst> prompt.)
    .
    .
    Inst> **exit <Enter>**
    .
    Automatically reconfiguring the operating system..
    .
    .
    ……Ready to restart…. **y <Enter>** (Restarts the system)
    .
    .
    The system will finish some processing and reboot. The OS load portion of the Software Install is complete.

Important!
Do not log into EZ Setup. It is no longer used as part of Install.

11. Continue to Section 3 of this document for the MR_Apps software load.

3- MR _APPS SOFTWARE LOAD

1. When the system is finished rebooting, log in as **root**. There is no password at this time. You will first see a startup box that will asks for the MrpApps CDROM. See Illustration 3-1.

GUIDED INSTALL LOAD SCREEN
ILLUSTRATION 3-1

2. Remove any CD from the CDROM drive and insert the MrpApps CDROM into the CDROM drive. Wait 20 seconds or until the amber light on the CDROM drive stops blinking and push the **<Load>** button. The Guided Install will load and start.

Note

Help documentation is built into the Guided Install GUI. Push the **<Help>** button on the tab you need information for in the GUI. When the GUI first starts, press the **<What's New>** button for information on using the GUI.

3. On initial startup, a popup box will appear over the Guided Install interface describing the tool and its use. After reading the information push the **<OK>** button to continue.

4. Next, a popup box (see Illustration 3-2) will appear over the Guided Install interface.

INSTALL CONFIGURATION POPUP SCREEN

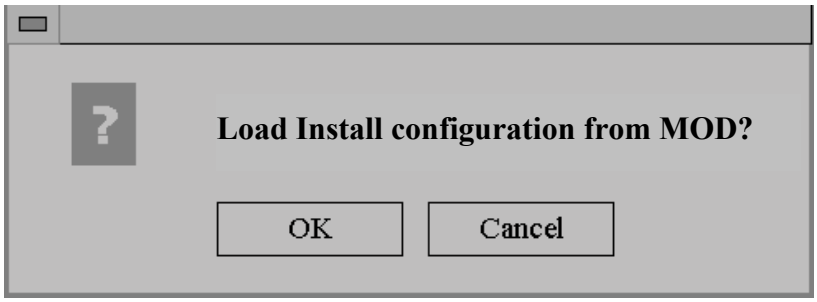


ILLUSTRATION 3-2

If you are reloading 8.3 or later software, insert the SaveInfo MOD (created in Section 1-4-2, Save GI Configurations) then push the **<OK>** button to reinstall your last GUI install configuration values. *(The normal SaveInfo files are not restored at this point in the software load. They will be restored in step 9.)* You will verify the correct values were restored by checking each tab in the next step.

Important: The last Install GUI configuration can only be installed if it was previously saved using the **<Save GI Configuration to MOD>** option per Section 1-4-2, Save GI Configurations.

If you did not perform Section 1-4-2, Save GI, push the **<Cancel>** button to continue manually with the install.

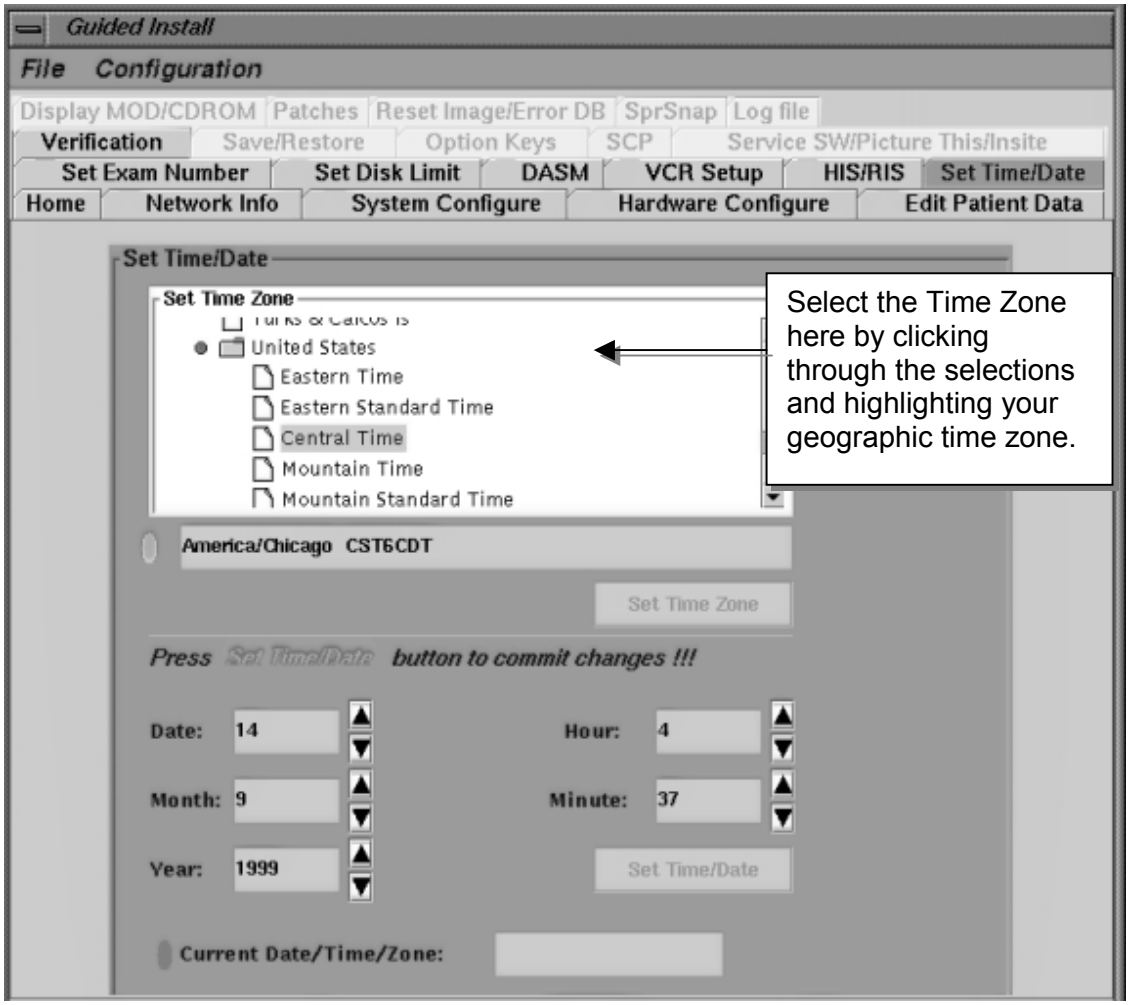
5. The Guided Install home screen is displayed. See Illustration 3-3.

GUIDED INSTALL - HOME SCREEN
ILLUSTRATION 3-3

6. Press the **<Next Tab>** button to move through active tabs from "**Network Info**" to "**Set Time/Data**". Fill out all empty entries or make any updates as appropriate. This information should have been saved in Table 1-1 in Section 1-2 of this document. When you reach the "Set Time/Date" tab, go to the "Set Time Zone" box and use the selections to set the time zone your system is in. See Illustration 3-4.

Important

If the site will be using the "YP" networking option, do not turn YP on until after the InSite IIP option has been configured and checked out. If YP is turned on first, it will cause the InSite checkout to fail.

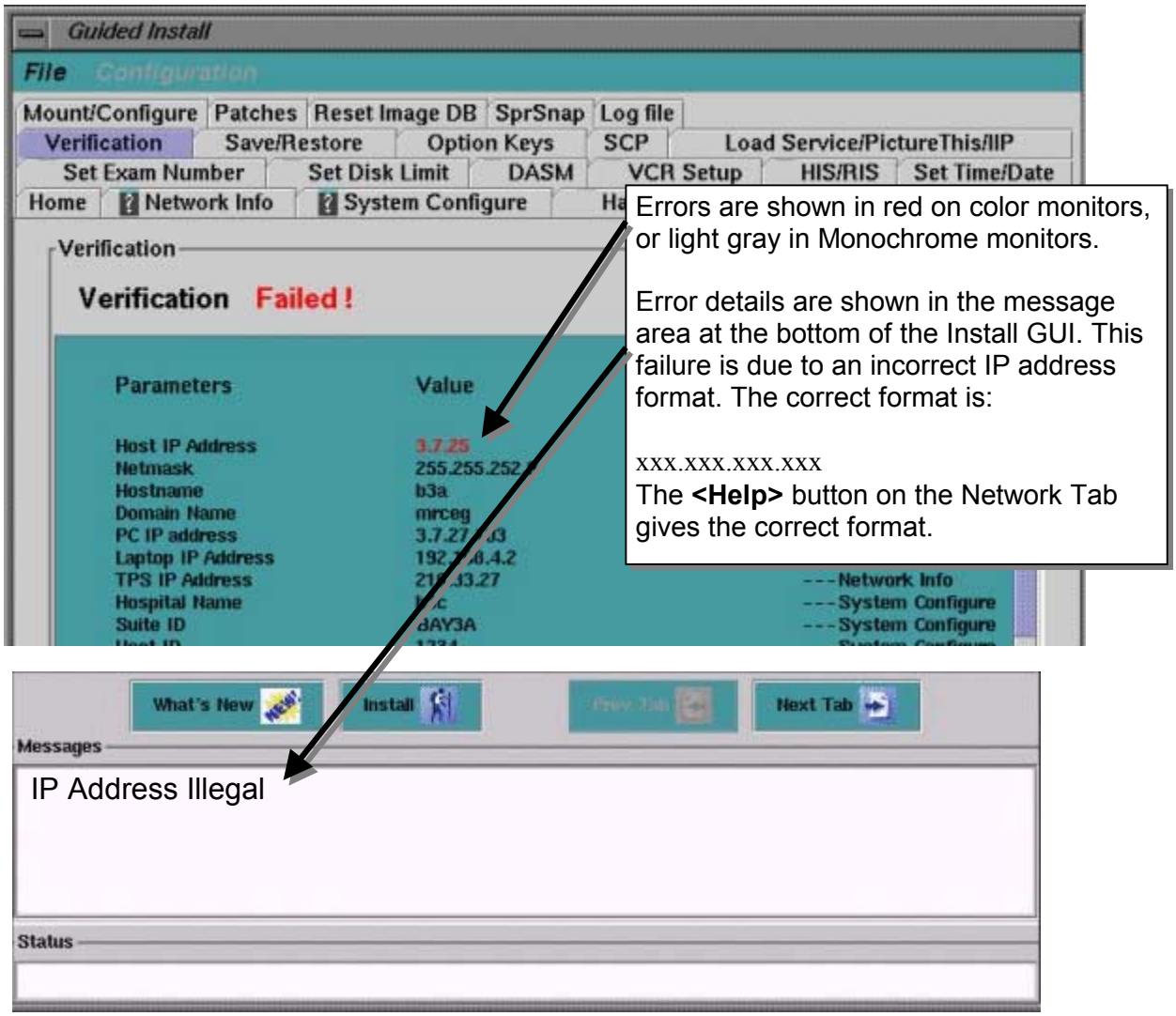


GUIDED INSTALL - SET TIME/DATE SCREEN
ILLUSTRATION 3-4

7. Proceed to the **Verification** tab. Once in the Verification tab, look at the pass or fail status of the entries. If any entry has a failed status, the **<Install Software>** button will not be active. Failed entries will be due to missing entries, or entries not in the correct format. Go to the tab with the error and correct it, then push the **<Install>** button to open the Verification tab again. If all entries pass verification at this point, push the **<Install Software>** button again to begin the MR Apps load. The MR Apps load will take 20-30 minutes, depending on the machine being loaded.

Note

It is not necessary that any one tab be filled out in any particular order. Just all required configuration tabs must be filled in or the install will not continue. The Verification Tab will list any formatting errors as well as current settings. See Illustration 3-5 for an example of a failure in the Verification Tab in networking (in the example, the Host IP Address is an incorrect format).



GUIDED INSTALL - VERIFICATION SCREEN
ILLUSTRATION 3-5

8. Once the MR Apps load is done, the popup in Illustration 3-6 is displayed. Push the **<OK>** button to close the popup.

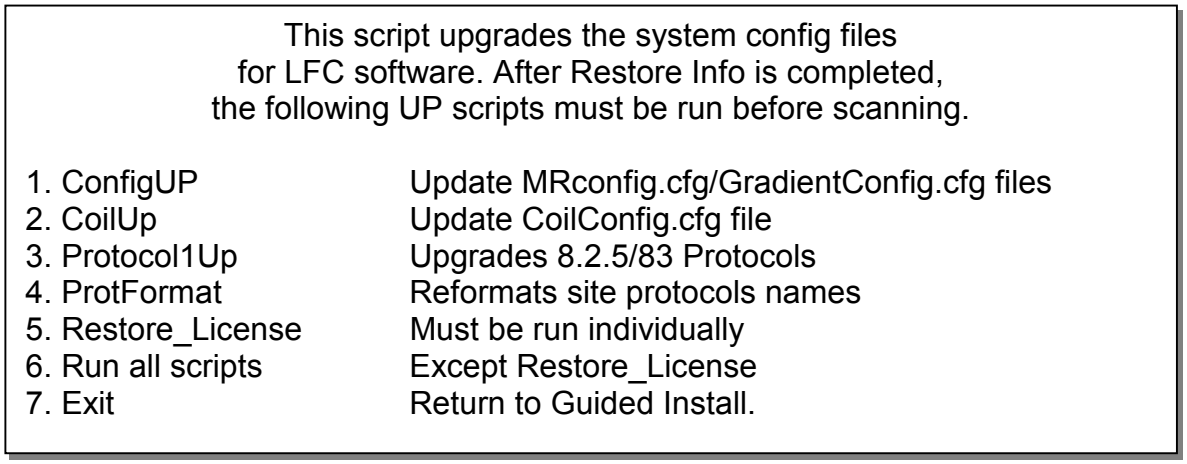
GUIDED INSTALL – SW DONE SCREEN
ILLUSTRATION 3-6

9. At this point the GUI will change from the Install phase to the Configure phase. If a SaveInfo info MOD is available for this site, proceed to the **Save/Restore** tab and Restore the system info. If no SaveInfo MOD is available, go to each tab in the Install GUI and fill in or update all system information manually. A help button is available on each tab, which will open a popup box with information on the required data and its format for that page.

10. When the RestoreInfo is finished a popup will open telling the installer that upgrade scripts must be run. See Illustration 3-7.

GUIDED INSTALL – UPGRADE SCRIPTS MESSAGE
ILLUSTRATION 3-7

11. Push the **<OK>** to continue. The upgrade script menu will open (see Illustration 3-8).



GUIDED INSTALL – UPGRADE SCRIPTS MENU
ILLUSTRATION 3-8

You must always run these updates in the following order:
a. Type: **6 <Enter>** *This will take about 1 minute to run.*
b. Type: **5 <Enter>** *This will take < 1 minute to run.*
c. Type: **7 <Enter>** *This will close the menu and return to the GUI.*

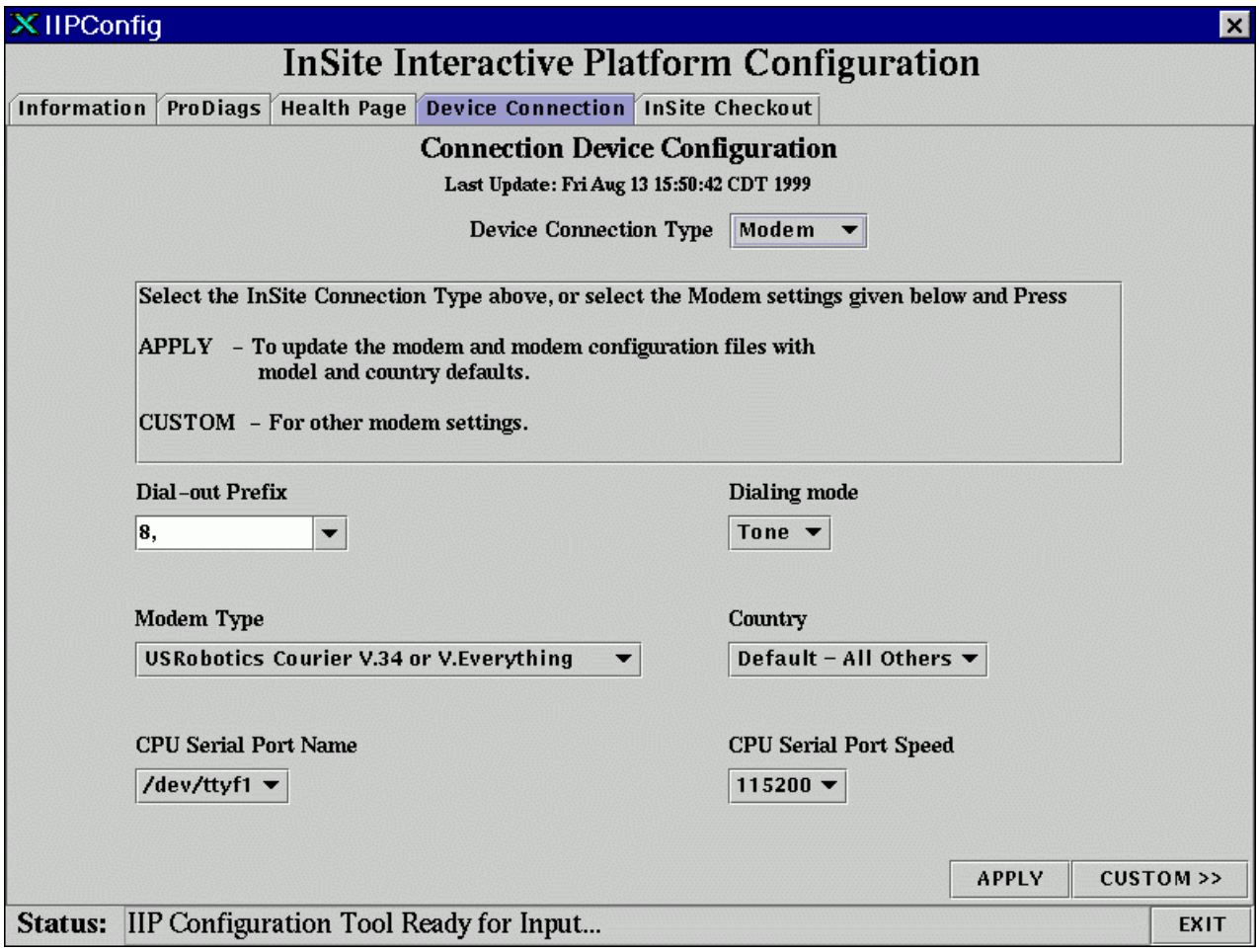
Note
Refer to Appendix A for parameters updated by the Configup scripts

12. Once back on the Guided Install screen, use the cursor to select **<File>** and then **<Quit>** at the top left of the GUI. When the GUI shuts down, the system will reboot and all changes restored or made will be set.

13. After the system has finished rebooting, once again log in as **root**. Password is **operator**.

14. You will be asked, once entering the root desktop, if you want to start the Install GUI. Push the **<Yes>** button.

15. When the install GUI opens, go to the **Load ServiceSW/Picture this/InSite** tab and install service software. *(Restricted Service Software is only available for GE use; Advanced Service Software is only available to sites with a valid Advanced Service Package Limited License.)* GEMS Field Engineers loading GEMS Restricted Service Software should also configure InSite Interactive at this time (see Illustration 3-9). Follow the instructions given in popup windows as presented.



CONFIGURE INSITE MENU
ILLUSTRATION 3-9

16. After service software installation, move through and check the accuracy of each tab. Insure all system options for the site are active. If needed, load software option keys at this time. If the site has any of the following option keys, they must always be reloaded, as they are not saved with SaveInfo: *IVI, Voxtool, FuncTool, and Clairview.*

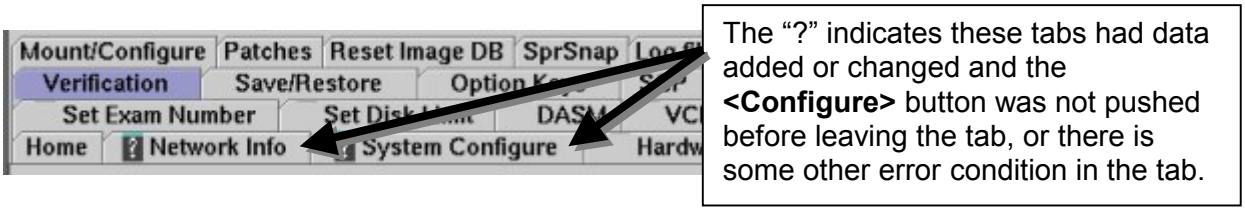
Note

Release 8.3 version M4 and later software come with two software MOD keys that must always be reloaded. These two MOD's (two sides on one MOD and one side on the other MOD to load) contain the LX Tools software that is shipped with every system.

17. Turn YP on only if the site's external network requires it. If YP is turned on, the system will take longer to boot (2 to 4 minutes). Be aware there is a small delay that may not be seen on other sites.

18. After information as been restored from MOD or changed in a tab, and configuration updates have been run, push the **<Configure>** button on the bottom of the tab to apply the configuration.

If the **<Configure>** button is not pushed to commit changes to a tab, or an error is present in a tab, a question mark will be seen on the tab, as shown in Illustration 3-10.



CONFIGURATION PROBLEM EXAMPLE
ILLUSTRATION 3-10

19. Perform a SaveInfo to save the latest changes.

20. Exit the install GUI by selecting **<File>** then **<Quit>** from the top of the interface. If any error conditions still exist, you will be warned that no changes will be made. If no error conditions are found, the GUI will save user parameters.

21. Reconnect the following hardware at this time if it was disconnected at the beginning of the install:
    - Network Interface

22. Log out of root and reboot the system.

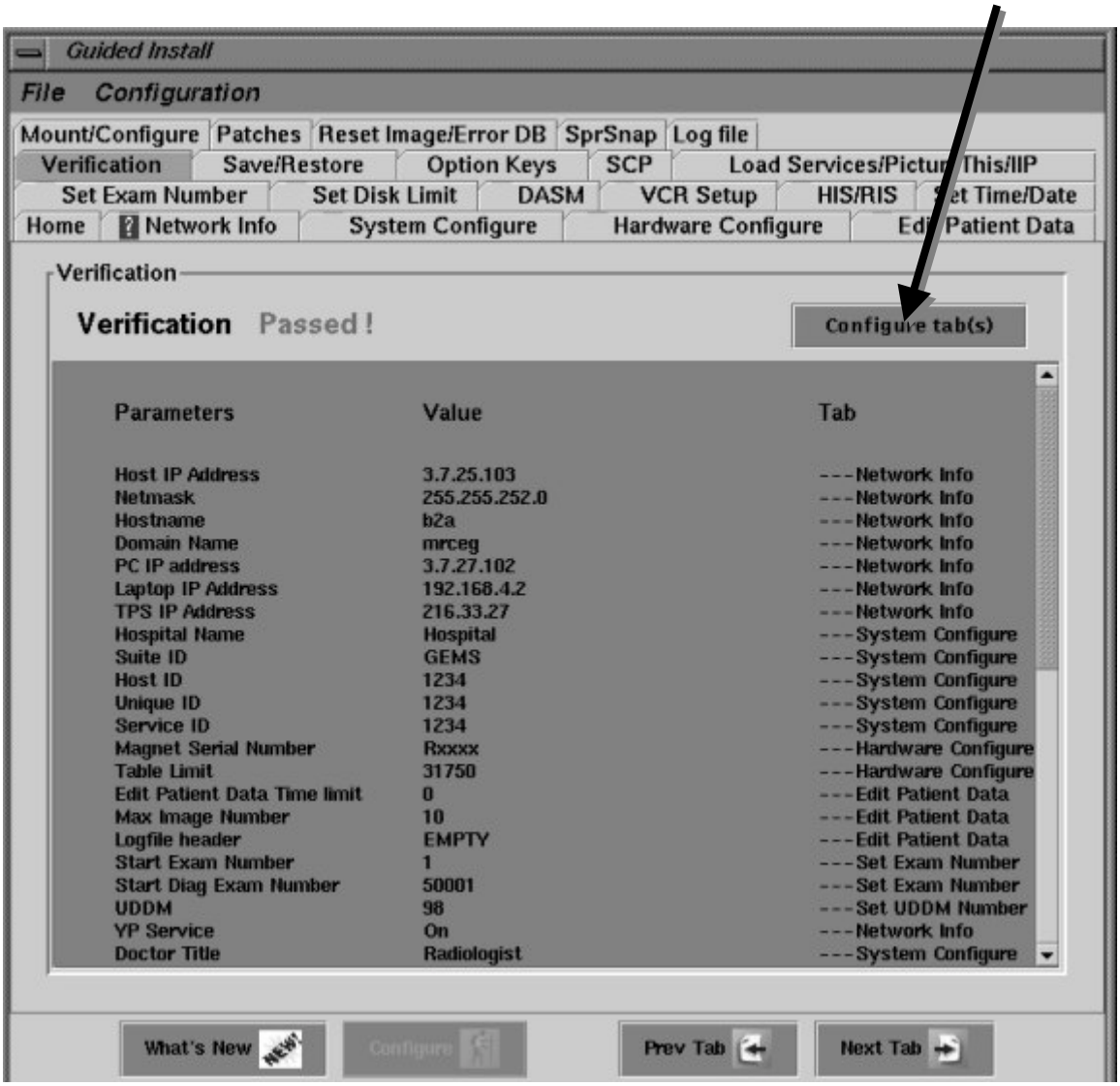
23. This concludes the software load. Continue with Section 5 to update the Monitor gamma settings.

4- RECONFIGURING THE SYSTEM USING THE INSTALL GUI

If this is a new/upgraded Signa installation or if the system just needs to be re-configured between software loads, do the following to start the Configuration GUI:

1. With Signa up and running, go to the service desktop and push the **<Install>** button on the toolbar. A C-Shell will open and ask for root password ("**operator**" **<Enter>** is the default). The Install GUI will load and start.

2. Help documentation is built into the GUI. Push the **<Help>** button on the tab you need information for in the GUI. Push the **<Next>** button to move through tabs in order. Modify entries to match your system as required. When satisfied, push the **<Configure>** button at the bottom of the tab page or wait until all tabs have been modified and go to the "**Verification**" tab. Review changes made are correct, then push the **<Configure Tab(s)>** button to update the system (see Illustration 4-1).



VERIFICATION MENU – CONFIGURE TABS
ILLUSTRATION 4-1

3. Before exiting the GUI, insert the SaveInfo MOD or new MOD into the drive. Go to the top left corner of the Install GUI and select **<File>** and then **<Save GI Configuration to MOD>**. This process does not create a SaveInfo disk. It just creates a copy of the information already entered in the GUI tabs for use in the next software install.

4. Exit the install GUI by selecting **<File>** then **<Quit>**. If any error conditions still exist, you will be warned that no changes will be made before exiting.

Note

The GUI will not automatically reboot the system in configure mode. It will be up to the user to reboot after making configurations.

5. If changes were made to the system configuration, select **[System Shutdown]** and reboot the systems for changes to take effect.

6. For new system installations or upgrades with preloaded software, continue with Section 5, Monitor Gamma Value Reset.

5- MONITOR GAMMA VALUE RESET

After a complete software load has finished, do the following steps to update the monitor configurations. This insures compatibility between monitor and camera.

1. In the C-Shell, type **su <Enter>** to log in as root; enter the root password (default is **operator**).

2. a. Type jot /usr/g/colorPix/colorPix.cfg <Enter> to edit the colorPix.cfg file.
   b. Modify the numerical value for “gamma” to **1.05**

3. In the jot window, select **File -> Save**, then **File -> Exit** to save the changes. This modifies the gamma value so whenever the system reboots, the new value is not lost.

4. In the C-Shell, enter the following:

   Color LCD Monitor: **gamma 1.05 <Enter>**

   This is in addition to steps 2 and 3. This step immediately changes the gamma value without the need to reboot the system.

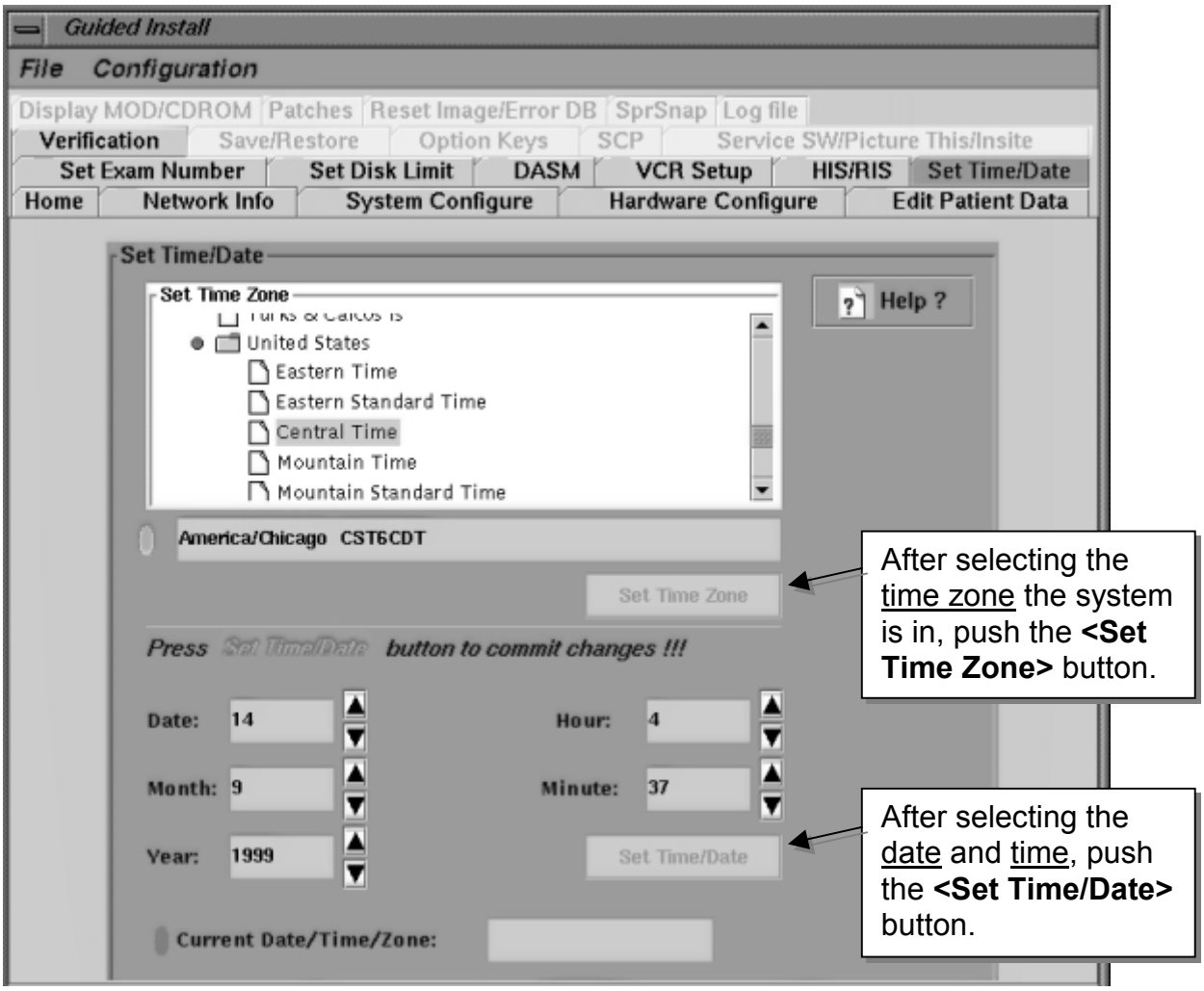
5. If you performed a complete software load, you are now done. For new system installations or upgrades with preloaded software, continue with Section 6, Set Time/Date Tab to complete the software reconfigurations.

6- SET TIME/DATE TAB

The **Time/Date** tab is the only tab that the Configure button will never be highlighted to set options. There are separate buttons for configuring this tab (see Illustration 6-1). If you need to re-configure the Host time and/or date at any time, do the following:

1. Select the Time Zone your system is located in, then push the **<Set Time Zone>** button.

2. Select the date and local time, then push the **<Set Time/Date>** button.



SET TIME/DATE MENU
ILLUSTRATION 6-1

APPENDIX A - HOST SOFTWARE INSTALL WORKSHEETS

Host IP Address: The Host IP should be obtained from the site network administrator if the scanner will be connected to the sites internal network. Or obtain and address by calling the OnLine Center (OLC) MR Support.

IWS PC IP Address: The IWS PC IP should be obtained from the site network administrator if the scanner will be connected to the sites internal network. Or obtain an address by calling the OnLine Center (OLC) MR Support.

FE Laptop IP Address: The Laptop IP should be obtained from the site network administrator if the scanner will be connected to the sites internal network. Or obtain an address by calling the OnLine Center (OLC) MR Support.

TPS Subnet Address: The TPS is on a subnet of the Signa LX scanner. A default address is loaded during the load from cold process and it should not be changed.

Hostname: This is the network name given to the scanner host computer.

Hospital Name: The Name of the hospital or other facility where the Horizon LX is installed. Name can include characters and/or integers up to 32 characters.

Doctors Title: The title to be used at the scanning site by the reading physician (Radiologist or Diagnostician).

Suite ID: Name of the Suite (if any) the scanner will be connected to. Leave blank otherwise.

Unique ID: The Unique System ID is a 16 alphanumeric character string assigned at the time the system is first installed. The Unique system ID is assigned by GE CARES when the first dispatch is opened to document the start of installation.

Service ID: The Service ID is a 16 alphanumeric character string assigned at the time the system is first installed. This is the same number that GE CARES uses to track financial and administrative data for the system.

Weight Unit: The weight system to be used by the scanner. Kilo Grams or US pounds.

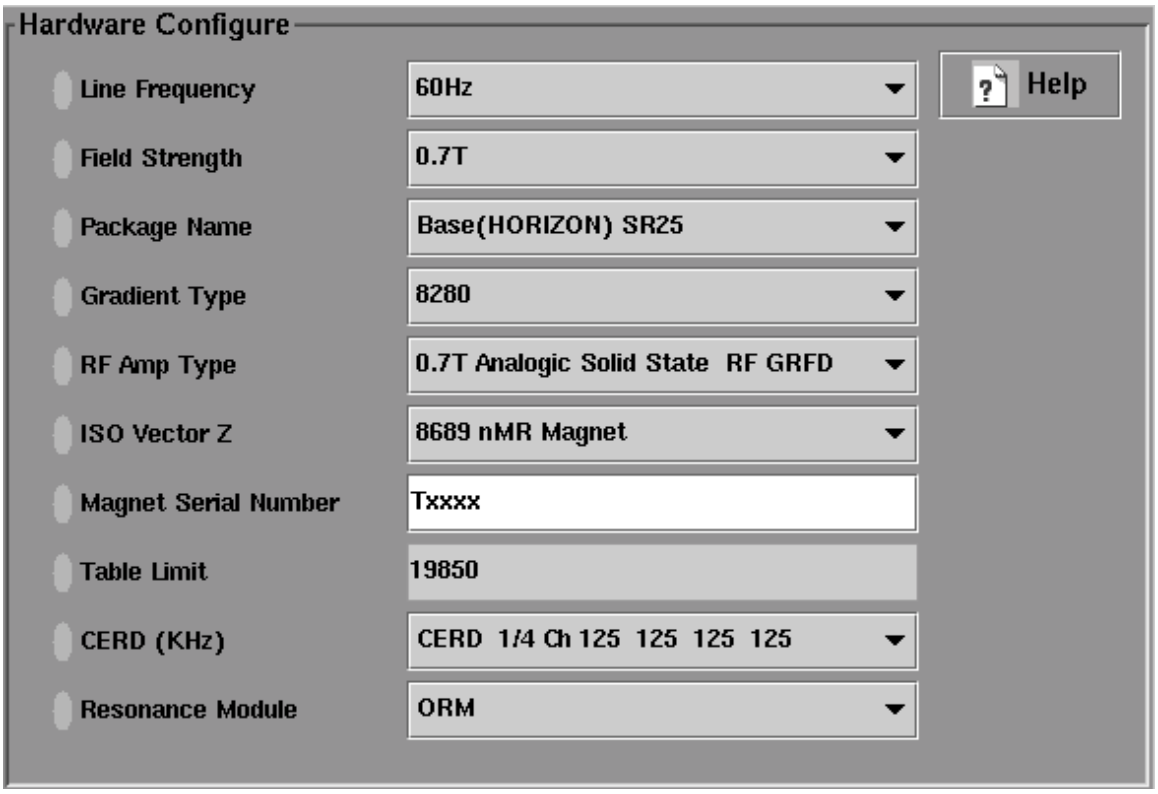
Monitor type: The type of monitor the scanner will be using.

Windows 95 OEM Number: The Microsoft OEM Number found on the “Proof of Authenticity” for Windows 95. _____

NetMask: For new installs, the Netmask should be obtained from the site network administrator if the scanner will be connected to the site’s internal network. If this is a stand-alone system, use the default netmask. For Release 8.3 and later, the netmask value is available from the Install GUI. For Release 8.2.5 systems, do the following to obtain the netmask value: **[System Shutdown]**, Log in as Root, type **operator <Enter>**, select **[Reconfig]** then **[Basic Network Setup]** to view the netmask.

A-1 OpenSpeed Hardware Configuration

Illustration A-1 shows the OpenSpeed Hardware Configuration setup.



OPENSPEED HARDWARE CONFIGURATION
ILLUSTRATION A-1

APPENDIX B - CONFIGURING MOUSE FOR LEFT HANDED USE

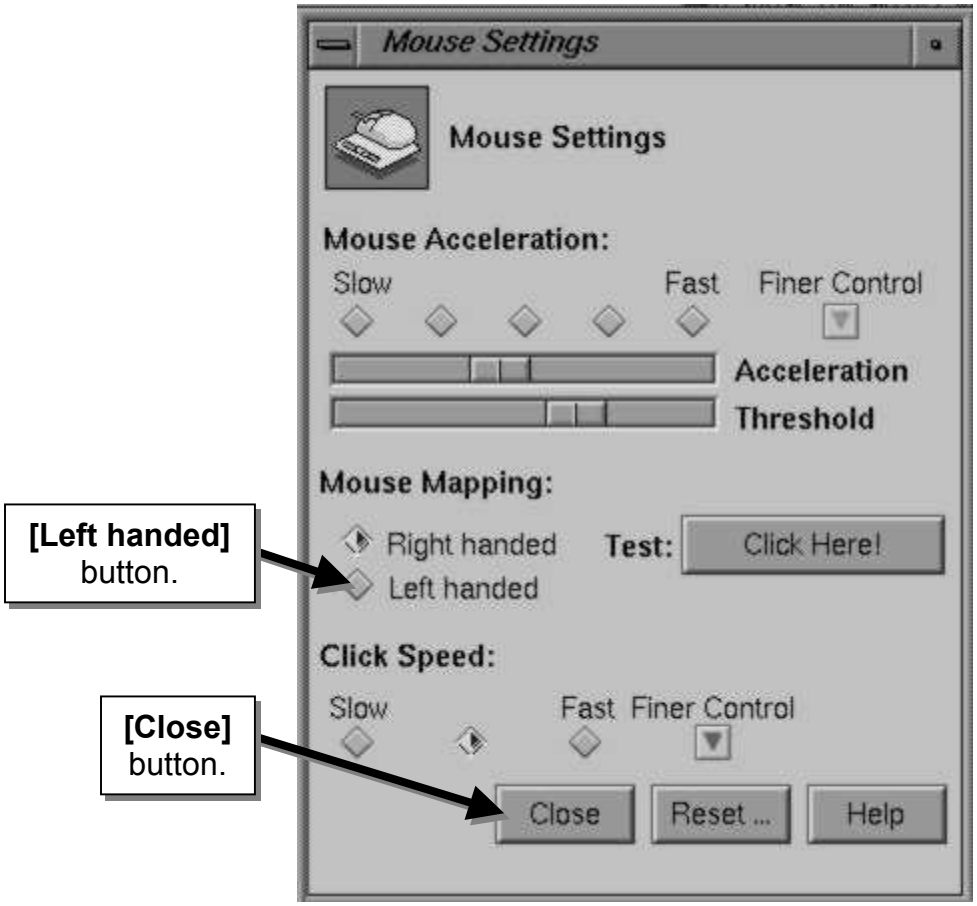
The system Host mouse is default configured for right handed use. It can be configured for permanent or temporary left handed use.

B-1 Configuring Mouse For Permanent Left Handed Use

1. If Signa is up and running, you must first log out and bring the system up to the Login screen. Otherwise, turn the system on and proceed to the Login screen.

2. Log in as **root**. The system default password is "**operator**". On the root desktop, use the mouse cursor on the ToolChest and click and slide through **[Desk Top]** then **[Customize]** then **[Mouse]**.

3. Push the **[Left Handed]** button under Mouse Mapping, then push the **[Close]** Button to accept the changes. See Illustration B-1.



SET TIME/DATE MENU
ILLUSTRATION B-1

4. Log out of the root desktop and reboot the system. To change the mouse mapping back to Right handed. Repeat this section but push the **[Right Handed]** button, then reboot the system.

B-2 Configuring Mouse For Temporary Left Handed Use

Using this method will change the mouse mapping from right handed to left handed, but only until Signa is rebooted, when it will revert back to right handed mapping.

1. If not already at the Signa scanning level, go there. Open a command window and on the command line type: **mouse <Enter>**.

2. Push the **[Left Handed]** button under Mouse Mapping, then push the **[Close]** Button to accept the changes. (See Illustration B-1.)

3. To reconfigure the mouse back to right handed operation, repeat this section but push the **[Right Handed]** button, or reboot Signa.

APPENDIX C - DISK DRIVE LOW LEVEL FORMAT

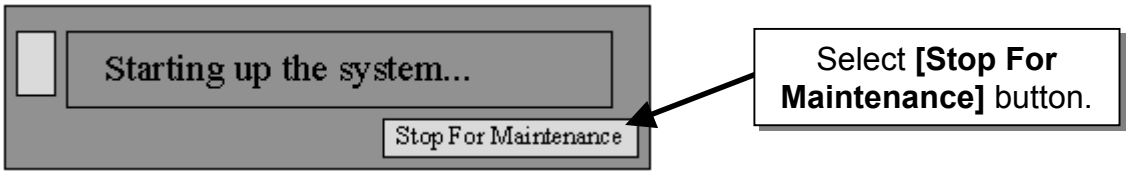
This section describes how to do a low-level format of the disk drives. A low-level format should only be done if loading a different Operating System (OS) or if suspected bad blocks on a disk drive are causing system problems. Depending on the system and disk drives, this procedure can last up to 1 hour per drive or as little as 20 minutes per drive.

1. Insert the **IRIX** 6.5 CD labeled "**Boot/Update**" into the CDROM Drive on the workstation (right side).

Note
User responses are bolded text

2. With the system up and running, go to the service desktop and select **[Shutdown]**. If the system is not up and running, switch on power at this time.

3. When prompted, click on the **[Restart Button]**. Stop the reboot process by clicking on the **[Stop For Maintenance]** button when it appears.



4. Next, click on the **[Enter Command Monitor]** button when it becomes available. Type the following:

>> **boot -f dksc(1,3,8)sash64 dksc(1,3,7)stand/fx.64 --x <Enter>**

5. Continue typing as follows:

`fx: "device-name" = (dksc)` **<Enter>**
.
`fx: ctlr# = (0)` **<Enter>**
.
`fx: drive# = (1)` **<Enter>** or **2 <Enter>** if doing the second drive.
.
`fx:` **d/fo <Enter>**
.
Press **<Enter>** to accept current parameters.
.
Type: **Yes <Enter>** to start the format.

6. The format can take up to 1 hour, depending on the system and disk drives that are being formated. There will be no prompts to the user while the format is running. Be patient and do not interfere with the system. When the format is finished the system will prompt with:

`Format completed successfully`
.
.

```
fx/debug>
```

7. Reset or power cycle the computer to exit debug and proceed to Section 2 of this document to proceed with the OS (Operating System) load for the system.

APPENDIX D - GENERAL INFORMATION AND NICE TO KNOWS

D-1 Bore Temperature Sensor - Must Be Working!

If the bore temperature sensor is disabled, sites with iDrive software will have problems. Sites running the *iDrive* software must have a functional bore temperature sense circuit. The symptom for a non-functional Bore sensor will be evident when an *iDrive* scan is attempted; the prescan will complete OK, but the scan will stop immediately after the first pulse is heard in the body coil. No images will be produced and no errors will appear in the log.

If the system has *iDrive* software (as listed in *Option Key* tab of Guided Install), to verify functional bore temperature circuit, set up the scan in Table D-1 (or any other Real Time scan). Download the scan and select **[Scan].** If prescan completes and the scan continues to run, you have a functional bore temperature circuit. If prescan completes OK, but the scan stops immediately after the first pulse, check the bore temperature circuit.

TABLE D-1
IDRIVE SAMPLE PROTOCOL

PATIENT REGISTER	**[New Pt]**	SCANNING RANGE	
		FOV.	**[32]**
PATIENT INFORMATION		Slice Thickness.	**[7**
Patient Id	**geservice**	Spacing	**[1.5]**
Patient Name	**test**	Start	**0**
Weight (Lb)	**111**	End..	**0**
	[Landmark]	# Slices	1 (default)
Landmark	**[Sternal Notch]**	L/R Center	0 (default)
		P/A Center	0 (default)
PATIENT PROTOCOLS	**[Patient Position]**	Table Delta	0.00 (default)
PATIENT POSITION		ACQUISITION TIMING	
Patient Position	**[>] [Supine]**	Freq	**[128]**
Patient Entry.	**[>] [Head First]**	Phase	**[128]**
Coil	**[...] [Body] [Accept]**	NEX	**[1]**
		Phase FOV	1.00 (default)
IMAGING PARAMETERS		Freq Dir	**[>] [R/L]**
Plane	**[>] [Axial]**	Auto Center Freq	**[>] [water]**
Mode	**[>] [2D]**	Autoshim	**[on]**
Pulse Seq	**[...] [FGRE] [Accept]**	(lowest window)	**[Save Series]**
Imaging Options	**[Real-time]**		
Psd Name	no entry		
Protocol	no entry		
SCAN TIMING			
# of Echoes	1 (default)		
TE	**[Mn Full]**		
TR.	**[Mn]**		
Flip Angle	**[20]**		
Bandwidth	**[62.50]**		

D-2 Signa Power up Delay

When Signa is first powered on there is a considerable period of time that nothing is seen on the monitor; up to 4 minutes depending on the computer type. The system is checking configurations and starting software processes at this time. If you are concerned that the system is hung, push the **<Esc>** button on the top left side of the keyboard. The system will then post to the monitor its entire boot up activities.

REVISION HISTORY

REV	DATE	AUTHOR	PRIMARY REASONS FOR CHANGE
A	Jan 25, 2000	K. Laughlin-Parker	Initial version (used Rev B 1/17/00 OW2SCA8F for initial version).
0	Mar 14, 2001	K. L-P	Added Section A-1; initial release
1	Mar 29, 2001	K. L-P	Updates per validation