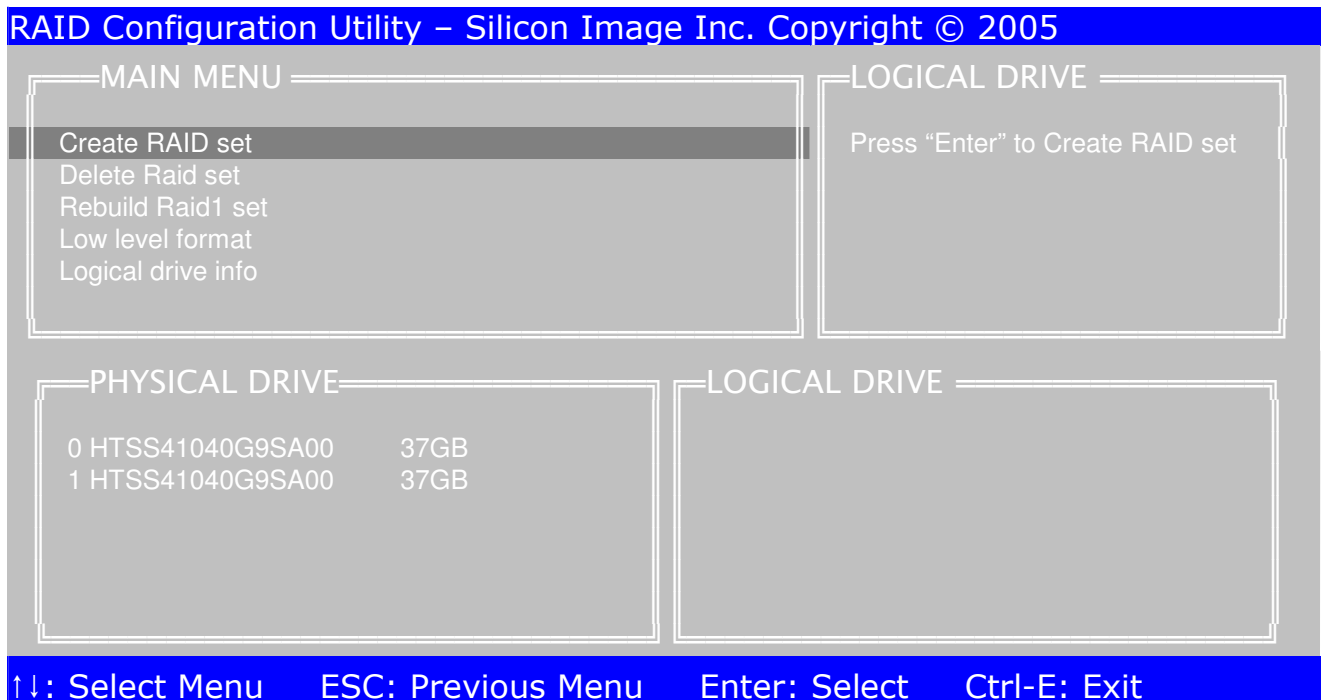


46xx_47xx_1546_1547 RAID Recovery/Set Up Instructions

Note: The Windows RAID utility should handle most RAID recovery situations without any trouble. In Windows, when the ICON in the RAID utility turns yellow a notification typically appears on the screen alerting you to a failure. Once you have identified which drive failed (through the RAID error/status log) you can hot swap the bad drive with a good one while you are still running Windows. If a new drive is added to replace an old one the drive will show up as gray and wait for you to manually select to create a RAID array in Windows. If you are re-inserting a drive that was previously part of the unit RAID array, the drive will show up as yellow, and the system will automatically start copying the good drive to the replacement drive. This operation takes a little over an hour. If the unit power is turned off during this copy process the RAID array copy process will start again the next time a system is booted. If you cannot boot into windows and need to recover with the BIOS follow the instructions below:

- 1.) Enter the RAID Controller Set Up Menu: Right after the BIOS Screen, when prompted onscreen hit CTRL-S or F4 key(s).
- 2.) Create An Array: Highlight "Create RAID set". Press <Enter>. A pop up menu will appear.



3.) Highlight pop up menu option "RAID1" Press<Enter>.

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<p>MAIN MENU</p> <ul style="list-style-type: none">Create RAID setDelete RAID setRebuild Raid1 setLow level formatLogical drive info	<p>RAID0</p> <p>RAID1</p> <p>SPARE DRIVE</p> <p>CONCATENATION</p>	<p>LOGICAL DRIVE</p> <p>Press "Enter" to Create RAID set</p>			
<p>PHYSICAL DRIVE</p> <table border="1"><tr><td>0 HTSS41040G9SA00</td><td>37GB</td></tr><tr><td>1 HTSS41040G9SA00</td><td>37GB</td></tr></table>	0 HTSS41040G9SA00	37GB	1 HTSS41040G9SA00	37GB	<p>LOGICAL DRIVE</p>
0 HTSS41040G9SA00	37GB				
1 HTSS41040G9SA00	37GB				

↑↓: Select Menu ESC: Previous Menu Enter: Select Ctrl-E: Exit

4.) Arrow down to "Manual configuration" then hit <Enter>.

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<p>MAIN MENU</p> <ul style="list-style-type: none">Auto configurationManual configuration	<p>LOGICAL DRIVE</p> <p>Press "Enter" to manually create a mirrored (RM01) set</p>				
<p>PHYSICAL DRIVE</p> <table border="1"><tr><td>0 HTSS41040G9SA00</td><td>37GB</td></tr><tr><td>1 HTSS41040G9SA00</td><td>37GB</td></tr></table>	0 HTSS41040G9SA00	37GB	1 HTSS41040G9SA00	37GB	<p>LOGICAL DRIVE</p>
0 HTSS41040G9SA00	37GB				
1 HTSS41040G9SA00	37GB				

↑↓: Select Menu ESC: Previous Menu Enter: Select Ctrl-E: Exit

- 5.) Drive 0 is highlighted automatically as the source drive. Press the [Enter] key to use it as the source drive.

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MAIN MENU Auto configuration Manual configuration	LOGICAL DRIVE Press "Enter" to select source drive of the raid set
PHYSICAL DRIVE 0 HTSS41040G9SA00 37GB 1 HTSS41040G9SA00 37GB	LOGICAL DRIVE

↑↓: Select Menu ESC: Previous Menu Enter: Select Ctrl-E: Exit

- 6.) Drive 1 is highlighted automatically as the target drive. Press the [Enter] key to use it as the target drive. A pop up menu will appear.

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MAIN MENU Auto configuration Manual configuration	LOGICAL DRIVE Press "Enter" to select target drive of the raid set
PHYSICAL DRIVE 0 HTSS41040G9SA00 37GB 1 HTSS41040G9SA00 37GB	LOGICAL DRIVE

↑↓: Select Menu ESC: Previous Menu Enter: Select Ctrl-E: Exit

7.) Highlight pop up menu option "Create with data copy". Press <Enter>.

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<p>MAIN MENU</p> <p>Auto configuration Manual configuration</p> <p>Create with data copy Create without data copy</p>	<p>LOGICAL DRIVE</p> <p>Enable disk copy for mirrored (RAID1) set Disk copy – copy current content of source drive to mirror drive</p>						
<p>PHYSICAL DRIVE</p> <table border="1"><tr><td>0</td><td>HTSS41040G9SA00</td><td>37GB</td></tr><tr><td>1</td><td>HTSS41040G9SA00</td><td>37GB</td></tr></table>	0	HTSS41040G9SA00	37GB	1	HTSS41040G9SA00	37GB	<p>LOGICAL DRIVE</p>
0	HTSS41040G9SA00	37GB					
1	HTSS41040G9SA00	37GB					

↑↓: Select Menu ESC: Previous Menu Enter: Select Ctrl-E: Exit

8.) Another pop up menu will appear. Select "Offline copy". Press [Enter].

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<p>MAIN MENU</p> <p>Auto configuration Manual configuration</p> <p>Online copy Offline copy</p>	<p>LOGICAL DRIVE</p> <p>Copy disk now</p>						
<p>PHYSICAL DRIVE</p> <table border="1"><tr><td>0</td><td>HTSS41040G9SA00</td><td>37GB</td></tr><tr><td>1</td><td>HTSS41040G9SA00</td><td>37GB</td></tr></table>	0	HTSS41040G9SA00	37GB	1	HTSS41040G9SA00	37GB	<p>LOGICAL DRIVE</p>
0	HTSS41040G9SA00	37GB					
1	HTSS41040G9SA00	37GB					

↑↓: Select Menu ESC: Previous Menu Enter: Select Ctrl-E: Exit

- 9.) A "Please input the raid size: xxGB" message will appear (xx Drive partition size. Default is entire drive). Press [Enter] to use default size.

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<p>MAIN MENU</p> <p>Auto configuration Manual configuration</p> <p>Please input the raid size: 37GB</p>	<p>LOGICAL DRIVE</p> <p>Press "Enter" to select the RAIDSize</p> <p>↑: increment 1GB raid size ↓: decrement 1GB raid size</p>				
<p>PHYSICAL DRIVE</p> <table><tr><td>0 HTSS41040G9SA00</td><td>37GB</td></tr><tr><td>1 HTSS41040G9SA00</td><td>37GB</td></tr></table>	0 HTSS41040G9SA00	37GB	1 HTSS41040G9SA00	37GB	<p>LOGICAL DRIVE</p>
0 HTSS41040G9SA00	37GB				
1 HTSS41040G9SA00	37GB				

↑↓: Select Menu ESC: Previous Menu Enter: Select Ctrl-E: Exit

- 10.) A "Are you sure (Y/N)?" message will appear. Press the "Y" key.

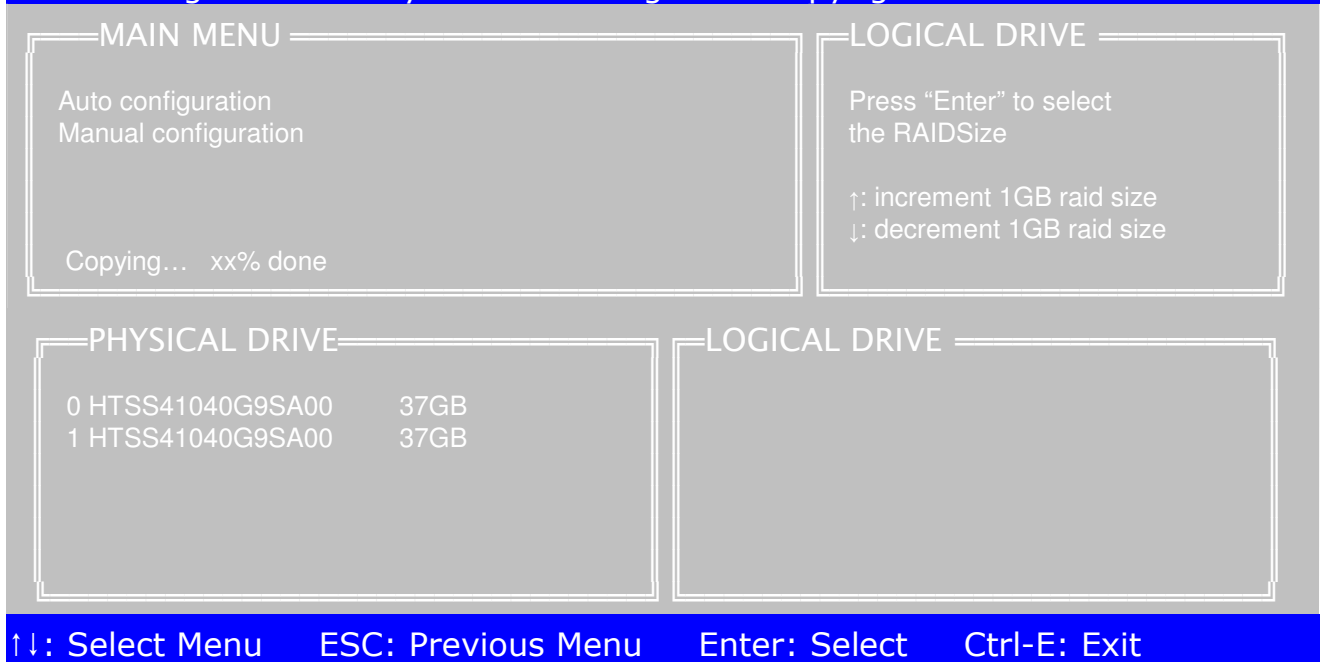
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<p>MAIN MENU</p> <p>Auto configuration Manual configuration</p> <p>Are you sure (Y/N)?</p>	<p>LOGICAL DRIVE</p> <p>Press "Enter" to select the RAIDSize</p> <p>↑: increment 1GB raid size ↓: decrement 1GB raid size</p>				
<p>PHYSICAL DRIVE</p> <table><tr><td>0 HTSS41040G9SA00</td><td>37GB</td></tr><tr><td>1 HTSS41040G9SA00</td><td>37GB</td></tr></table>	0 HTSS41040G9SA00	37GB	1 HTSS41040G9SA00	37GB	<p>LOGICAL DRIVE</p>
0 HTSS41040G9SA00	37GB				
1 HTSS41040G9SA00	37GB				

↑↓: Select Menu ESC: Previous Menu Enter: Select Ctrl-E: Exit

11.) A message will appear as follows "Copying ... xx% done (xx=changing %).

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12.) When the copying is complete the original menu will appear.

13.) Press [Ctrl]+E to exit the RAID Set Up Utility.

14.) Follow the instructions below to install Windows 2000 or Windows XP.

Installing the Device Driver for Windows 2000

Installing the Driver When Installing Windows 2000

To install the driver when installing Windows 2000, follow these steps:

1. Insert the Pro-face Windows 2000 Recovery Media CD and restart your system to begin the Windows 2000 installation. You might see the following message: Press any key to boot from CD.

You will have five seconds to press a key to boot from the CD.

2. When the following message is displayed, press **F6**: Press F6 if you need to install a third party SCSI, SATA, or RAID driver...

3. A message will appear after a short time, prompting you to install your driver. Press **S** to specify a driver.

4. Insert the "Silicon image Sil 3132 SoftRAID 5 Controller for Windows" driver floppy disk into the floppy disk drive and press **Enter**.

5. You will be presented with a selection of driver options. Using the arrow keys, select the following driver and press **Enter**: "Silicon image Sil 3132 SoftRAID 5 Controller for Windows 2000"

If you have no other controllers to add, press **Enter** to continue with the Windows 2000 installation.

6. Follow the **Pro-face/Xycom Workstation Recovery Media Software Installation Instructions For Microsoft Windows 2000** document that is found on the Pro-face/Xycom Documentation and Support Library CD that is included with your unit. (Also available in the Resource Library at <http://www.profaceamerica.com>)

Installing the Device Driver for Windows XP

Note: For the most up-to-date Windows XP drivers and installation instructions, see the Readme file.

Warning: When installing the device driver for Windows XP, install only the Silicon Image device driver. Other manufacturer's device drivers may not be compatible with the Silicon image SATA RAID controller.

Installing the Driver When Installing Windows XP

To install the driver when installing Windows XP, follow these steps:

1. Insert the Windows XP setup media CD and restart your system to begin the Windows XP installation. You might see the following message:

Press any key to boot from CD.

You will have five seconds to press a key to boot from the CD.

2. When the following message appears, press **F6**: Press F6 if you need to install a third party SCSI, SATA, or RAID driver...

3. A message will appear after a short time, prompting you to install your driver. Press **S** to specify a driver.

4. Insert the "Silicon image Sil 3132 SoftRAID 5 Controller for Windows" driver floppy disk into the floppy disk drive and press **Enter**.

5. You will be presented with a selection of driver options. Using the arrow keys, select the following driver and press **S**: "Silicon image Sil 3132 SoftRAID 5 Controller for Windows XP/Server 2003".

If you have no other controllers to add, press **Enter** to continue with the Windows XP installation.

6. Follow the "**Pro-face/Xycom Workstation Software Installation Instructions For Microsoft Windows XP**" document that is found on the Pro-face/Xycom Documentation and Support Library CD that is included with your unit. (Also available in the Resource Library at <http://www.profaceamerica.com>)

Q: How do I rebuild a mirror array when one of the drives corrupts? (How do I rebuild a RAID 1 array when one of the drives fails?)

A: Rebuild the drive by following these steps:

1. If you have another drive available for use in rebuilding the RAID 1 array. Power OFF and replace the failed drive.
2. If you have no other drive available for rebuild, you will need to select the drive you wish to use for the rebuild source and target when prompted. Note: The default is to use drive 0 as the source. If this is not the case then you must manually choose the correct drive when prompted.
3. Restart the system and use the RAID BIOS Menu to setup your RAID array.
4. Enter the RAID Controller Set Up Menu: Right after the BIOS Screen, when prompted on screen hit CTRL-S or F4 key(s).
5. Destroy the RAID1 relationship. (Use "Delete RAID set" option)
6. If you need to erase corrupted data on drives then select the low level format, and quick format and the drive that needs formatting if applicable.
7. Select the source and target drive and rebuild using RAID setup instructions above.
8. Continue to boot.

Q: Do I have to use a special kind of HD to support RAID.

A. All RAID arrays require at least two drives of the same size. On 46xx, 47xx, 1546, and 1547 Pro-face/Xycom units we use two SATA drives. Any two SATA drives of the same size will work as long as the unit has a RAID hardware configuration.

Q: How can I tell if my unit hardware configuration supports RAID.

A. On the 46xx, 47xx, 1546, and 1547 Pro-face/Xycom RAID units, during the BIOS POST a prompt will be displayed instructing you to press CTRL-S or F4 key(s) to enter the RAID setup utility. If this prompt doesn't appear at any time during the POST, then your unit does not support RAID.