



8631AF-8032AF Upgrade Instructions

15-18032-81 Revision A

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This document includes instructions for changing an OptiPac-3 8631AF to a RDPac 8032AF.

The procedure requires new firmware upgrade, removal and replacement of the cover, drive plate, and one optical drive.

Contents

The following parts should be included in the upgrade kit. If any part is missing or damaged, contact Bering Customer Service at the above address.

- 1 8631AF-8032AF Upgrade Instructions (this document)
- 1 Removable hard drive (RHD)
- 1 RHD adapter
- 1 Firmware cartridge
- 1 8032AF users manual
- 1 Upgrade label
- 1 Set of keys
- 1 Hardware kit

Requirements

Only qualified technical personnel should perform this procedure

Required Tools:

- #2 Phillips screwdriver
- 1/4" Hex nut driver
- Static free workbench

Overview

The procedure performs the following general steps to upgrade the system.

- Install new firmware using the Firmware cartridge
- Remove cover
- Remove drive plate
- Remove right optical drive
- Install new RHD to the right side of drive plate
- Install new RHD adapter
- Install drive plate
- Plug SCSI cable and DC harness into drives
- Install cover

Upgrade Procedure

This upgrade assumes your OptiPac-3 8631AF is fully operational.

If you need assistance or have questions about this upgrade, contact Bering Customer service by one of the following methods.

Email: help@bering.com

Upgrade the Firmware

1. Remove the OptiPac-3 from the rack mount by removing four screws from the bottom of the rack mount.
2. Plug a power cord into the OptiPac-3 system.
3. While pressing both the ENTER and SELECT buttons, power on the OptiPac-3. You can release the buttons after “wait for drive to power up” appears in the LCD display. When the date and time is displayed continue with the next step.
4. Press SELECT until Configurations is displayed, then press ENTER.
5. The LCD will display: Admin mode required.
6. Press SELECT and ENTER buttons at the same time until Administrator Mode appears on the LCD.
7. Press SELECT until Return to Main appears, then press ENTER.
8. Press SELECT until Utilities appears, then press ENTER.
9. Press SELECT again to display the firmware ROM version.
10. Press SELECT until Tests is displayed and then press ENTER.
11. Press SELECT until Enable Firmware Load is displayed and then press ENTER.
12. The LCD will display: Ready to Load Firmware!
13. Press SELECT.
14. The LCD will display: Disable Firmware Load.
15. Press SELECT.
16. The LCD will display: Load firmware cartridge?
17. Insert the firmware cartridge into the MO drive and wait for the cartridge to spin up (about 10 seconds).
18. Press the ENTER button.
19. The LCD will display:
Bering DISK 8032
Ver F.B0 No
The version number varies from the above display. It should match the version number printed on the label of the upgrade cartridge. If it displays “No Loadable Firmware Found,” contact Bering Customer Service.
20. Press SELECT to change the No to Yes and then press ENTER. The Flash memory will be erased and the firmware will be copied to the Flash memory. When the firmware load is complete the cartridge will eject and the OptiPac-3 will automatically reboot.

Note:

Do not turn power off. Lost of power, the unit may become unusable and it will have to be returned to factory to reload the firmware.

21. Remove the cartridge from the drive.
22. Enable Administrator mode, go to the Utilities menu and check the FW version. It should now match the new firmware version (example: F.B0-nn)
23. Power off the unit and unplug the AC power cord.

Upgrade the hardware.

Removing the Cover

24. Remove four screws securing the cover to the back panel. (Fig. 1)

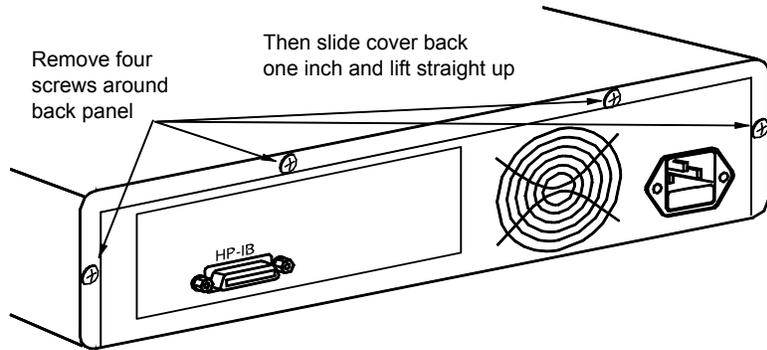


Fig. 1: 8631AF Rear View

25. Slide the cover toward the back of the OptiPac-3 about one inch until it stops.
26. Remove the cover by lifting it straight up.

Remove the Drive Plate

27. Unplug the 50 pin gray flat ribbon SCSI cable from the back of MO drive (B) and the RHD (C), noting the orientation of pin 1 of the cable (red or blue stripe). (Fig. 2)
28. Unplug the DC power cable from the both DC Power Connectors. (Fig. 2)
29. Remove the three mounting screws securing the drive plate to the chassis. (Fig. 2)

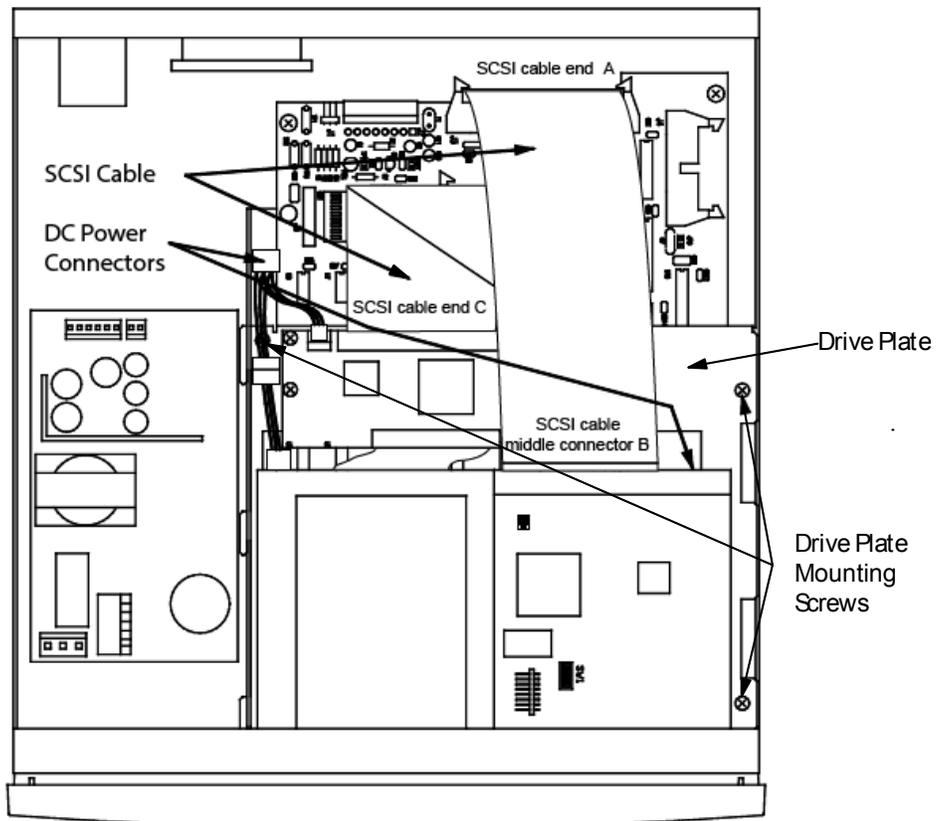


Fig. 2: 8631AF Internal View

30. Slide the drive plate toward the back of the chassis, then slide the drive plate out the right side of the chassis.
31. Remove the four screws securing the MO (right) drive from the bottom of the drive plate.
32. Set the new RHD drive onto the right side (Fig. 3) of the drive plate. The front of the RHD drive should be even with the front of the existing RHD drive chassis.
33. Secure the new RHD drive to the drive plate with the four provided flat head screws.

Attach the RHD to the Drive Plate

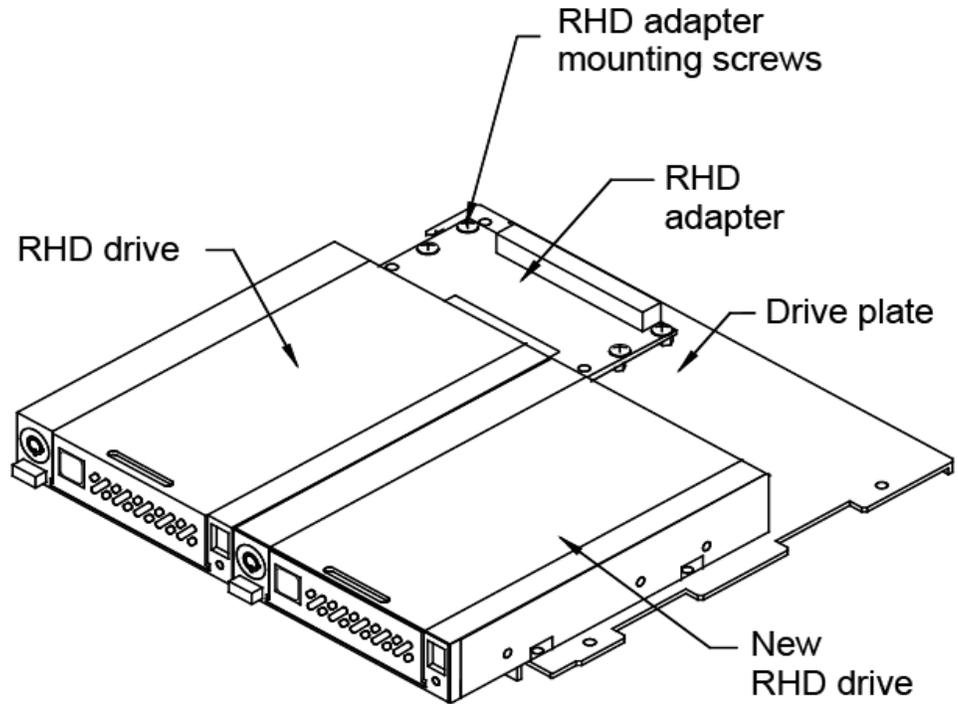


Fig. 3: New RHD drive

Install the Drive Plate

34. Install the drive plate into the OptiPac-3 from the right side, align three hooks into the slots, and slide it forward.
35. Secure the drive plate to the chassis with three 6-32x1/4 screws.

Install the new RHD adapter

36. Remove 4 RHD adapter mounting screws (Fig. 3). In some models, there are only 3 screws.

37. Install three or four standoffs and washers replacing the adapter mounting screws. (Fig. 4)

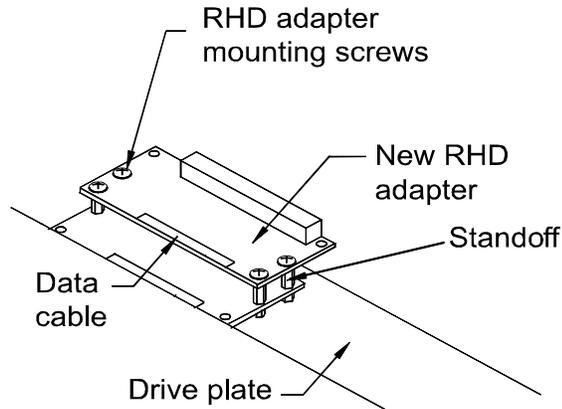


Fig. 4: New RHD adapter

38. Plug the SCSI cable end C to the existing RHD adapter (Fig. 2).
39. Install the new RHD adapter with three or four 6-32x1/4 screws using the mounting holes closest to the flat ribbon cable. (Fig. 4)
40. Plug the flat ribbon SCSI cable middle connector B to the new RHD adapter. SCSI cable end C should be plugged in to the original RHD adapter underneath the B. The SCSI cable end A should be plugged in to the controller (Fig. 5).
41. Connect the Data cable from the new RHD adapter to the RHD drive (Fig. 5).
42. Connect the DC cables from the new RHD adapter to the new RHD drive (Fig. 5 point E).
43. Plug the DC power harness cables into the RHD adapters.

Note:

You may carefully clip the existing DC power cable tie wraps as applicable to enable more freedom of movement and reduce cable strain.

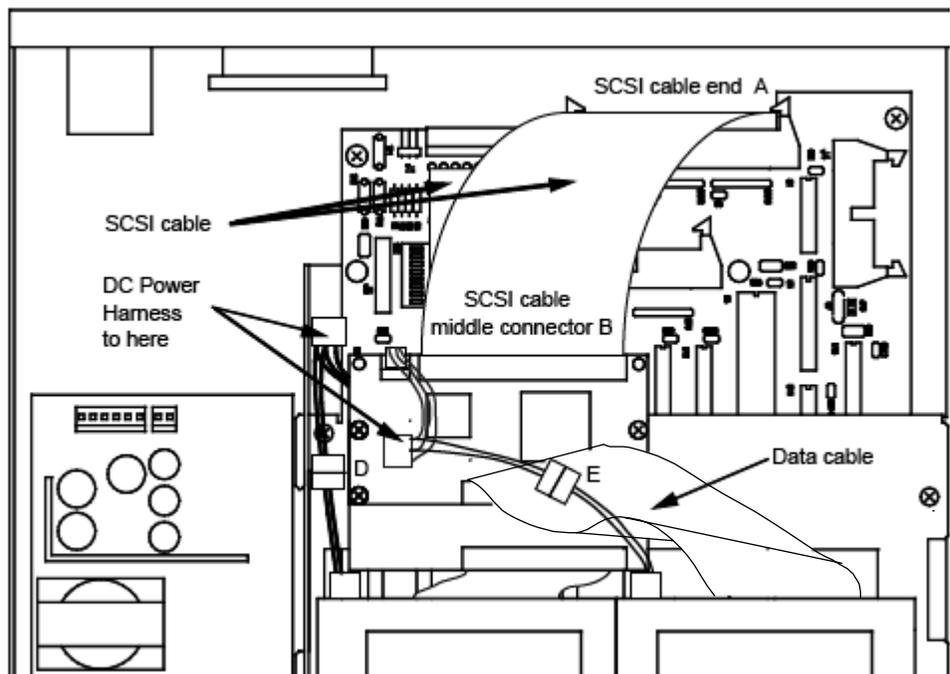


Fig. 5: Cables

Install the Cover

44. Place the cover onto the chassis from above and slide it forward.
45. Secure the cover with four 6-32x1/4 panhead screws through the back panel.
46. Place the provided upgrade label on the bottom of the upgraded RDPac, next to the original label. The serial number of the unit will remain the same.
47. Install the RDPac in the rack mount if required.
48. Read the user's manual for proper operation procedures.