Upgrading BMDM and BMRG Software and MPM, BDS and DCM Firmware



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Upgrading BMDM and BMRG Software and MPM, BDS and DCM Firmware, Book Revision 5.0, P/N 4200-019

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Regulatory Information

Type of Service: The MPM Series and the BDS Series equipment is designed to be used on standard device telephone lines. It connects to the telephone line by means of a standard jack called the USOC RJ11C (or USOC FJ45S). Connection to telephone company provided coin service (central office implemented systems) is prohibited. Connection to party line service is subject to state tariffs.

Telephone Company Procedures: The goal of the telephone company is to provide you with the best service it can. To do this, it may occasionally be necessary for the company to make changes in its equipment, operations or procedures. If these changes might affect your service or the operation of your equipment, the telephone company will give you notice, in writing, to allow you to make any changes necessary to maintain uninterrupted service.

In certain circumstances, it may be necessary for the telephone company to request information from you concerning the equipment that you have connected to your telephone line. Upon request of the telephone company, provide the FCC registration number and the ringer equivalence number (REN); both of these items are listed on the equipment label. The sum of all the RENs on your telephone line should be less than five in order to assure proper service from the telephone company. In some cases, a sum of five may not be useable on a given line.

If Problems Arise: If any of your telephone equipment is not operating properly, you should immediately remove it from your telephone line, as it may cause harm to the telephone network. If the telephone company notes a problem, it may temporarily discontinue service. When practical, the company will notify you in advance of the disconnection. If advance notice is not feasible, you will be notified as soon as possible. When you are notified, you will be given the opportunity to correct the problem and informed of your right to file a complaint with the FCC. Contact your telephone company if you have any questions about your telephone line.

Safety Information

- Except as explained in this manual, do not attempt to service Albércorp equipment yourself. Opening the equipment may expose you to dangerous voltages. Refer servicing beyond that described in this manual to authorized personnel.
- Do not allow liquids or moisture to get into the equipment. If liquid does get into the equipment, unplug it immediately and contact your nearest authorized service center or Albércorp directly.
- Ensure equipment is provided adequate ventilation. Do not block equipment ventilation openings.
- Do not exceed equipment voltage or power ratings and capabilities.
- Make sure that equipment is properly grounded.
- Do not let unauthorized persons operate the equipment.
- Do not energize the cabinet or any component with 115VAC or battery voltage until after the installation is complete.
- Use of this product in a manner not specified could compromise the designed-in safety of this product.

WARNING: High voltage or current may be present in the equipment. Only qualified personnel should perform the operations described in this manual.

WARNING: High voltages exist inside the system components and on the equipment terminals. Calibration must be performed only by technically qualified persons. Observe electrical safety precautions when removing and installing equipment covers, and when connecting leads and making adjustments.

Upgrading BMDM and BMRG Software and MPM, BDS and DCM Firmware

1 Introduction

This document describes how to upgrade the following:

- BMDM program software to Version 5.00B20. (Existing software must be Ver 2.0 to 4.11B8.)
- BMRG program software to Version 1.06A.
- MPM-100 firmware to Version 1.23.
- BDS-256 Controller firmware to Version 2.13.
- BDS-256 DCM firmware to Version 2.38.

Upgrades for software and firmware are distributed on one CD. Software resides in the computer that controls the MPM-100 and BDS-256 systems. Firmware resides in the MPM, BDS Controller and DCMs.

For more information or to download files, go to the Albér Web site at www.alber.com and click on Updates on the Home Page. You may download User's Guides from the Technical Library section of the Web site. For further assistance or to get technical support, contact Albér at (561) 997-2299.

2 Documentation

The following is a list of documents supplied with the software upgrade. These documents are on the program CD or can be accessed within the download file from the Alber Web site at www.alber.com.

Directory Path	Document File Name	Document Description
[drive letter]:\manual	MPMBDSProdDescR100803.pdf	MPM and BDS Product Description
	4200_004_BMDMUGR500803.pdf	BMDM Software and Report Generator User's Guide
	BDSCtrlInstallR340803.pdf	BDS and Controller Installation
	MPMAInstallR240803.pdf	MPM Installation Instructions
	4200_019_BMDMFWUPR501003.pdf	Software / Firmware Upgrade Procedure for BMDM, BMRG, MPM, BDS and DCM
[drive letter]:\release notes	BMDMRelNotesR501003.pdf	BMDM Software Release Notes
	BDSRelNotesR210803.pdf	BDS Controller Firmware Release Notes
	DCMRelNotesR2380803.pdf	DCM Firmware Release Notes
	MPMRelNotesR1230703.pdf	MPM Firmware Release Notes

3 Extract Data From the Monitor

Before upgrading the software or firmware, extract all data presently in the MPM or BDS monitor and store it to the Central computer database. To extract data, do the following:



To start the program, double-click the BMDM icon.



From the String Status screen, select the first string name. On the toolbar, click the Connection button.



After connection, from the String View screen, click the View Voltage button.

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Click View Resistance. One of the following two will occur:

1. The Cell Resistance bar graph appears. This indicates data stored in the MPM or BDS has been transferred.

2. The message No new resistance test results appears. Click the OK button to continue.



Click the View Alarms button.



Click the Current History button. One of the following two will occur:

1. The list of current alarms appears. This indicates historical alarm data stored in the MPM or BDS has been transferred. Close the Current Alarms window.

2. The message No current historical alarm appears. Click the OK button and close the Current Alarms window.



Click the View Discharge button. One of the following two will occur.

1. The list of discharges appears. This indicates discharge data stored in the MPM or BDS has been transferred. Close the Discharge window.

2. The message No discharge record appears. Click the OK button and close the Discharge window.

Close the String View screen to return to String Status screen.

Select the next string name, and repeat the above steps until all data is extracted from all monitors.

4 Install the BMDM and BMRG Software Upgrades

Install the Battery Monitor Data Manager (BMDM) and Battery Monitor Report Generator (BMRG) upgrades onto the computer as follows.

4.1 Install the Software

Close all open programs.

Insert the CD into the computer.

NOTE: If the setup screen does not automatically start, select Start|Run from the Windows desktop and, from the Run dialog box, type d:\setup (or other appropriate drive letter) to start the installation.

Follow the on-screen instructions to install the upgrade.

4.2 Remove the Old Icon



After upgrade installation, two new icons, BMDM and BMRG, appear on the desktop. You must remove the old BMDM (Data Manager) and BMRG (Report Generator) icons. To remove the icons, right click on each old icon and select Delete from the pop-up menu that appears.

4.3 Start the New Program



To start the program, double-click the new BMDM icon on the desktop.

The program can automatically update the database. When the program asks if you want to update the database, click Yes.

To confirm the database is updated, select Setup|Preferences. Verify the Database Version number 3.40 appears at the top of the Preferences screen.

Click the OK button to close the Preferences screen.

Complete the following MPM and BDS sections as required.

5 Upgrading MPM Firmware

If you have MPMs connected, complete this section to upgrade the MPM firmware. You must upgrade each MPM listed on the String Status screen.

You may perform the upgrade from any available port, such as the RS-232, telephone or network port, but you must confirm that no other computer (PC) is communicating with the MPM via a different port while you are upgrading.

5.1 Confirm MPM Firmware Version



At this point, the BMDM String Status screen should be displayed. If not, double-click the BMDM icon to start the program.



Select the site name, then click the Connection button on the toolbar.

After connection, select Diagnostics Self Test from the String Status screen.

Enter the password. The default password is alber

If the displayed Firmware Version number is 1.23, no upgrade is needed, and you should click Close to exit Diagnostics, and close the String View screen to return to the String Status screen.

If upgrade is required:

- 1. Click Close to exit Diagnostics.
- 2. Close the String View screen to return to the String Status screen.
- 3. Complete the following section.

5.2 Upgrading the Firmware (MPM)



From the String Status screen, select the site name, then click the Connection button on the toolbar.

After connection, from the String View screen, select Setup|Upgrade Firmware. The message appears:

Confirm	×
ৃ	In order to initiate the upgrade process, the monitor must be rebooted. Click the yes button below to disconnect and reboot the monitor. Wait 2 minutes, and then reconnect to this string. Click Setup, and then click Upgrade Firmware to continue with the upgrade process. Continue with upgrade?
	[<u>Y</u> es] Cancel

Click Yes to start the process.



After two minutes, connect to the site again by selecting the site name and clicking the Connection button.

After connection, from the String View screen, select Setup|Upgrade Firmware.

At the Open Upgrade File screen, select the file: VER123.MP1 then click Open.

Open Upgrad	de File		? ×
Look in: 🔁	upgrade	- 🗈 💆	📸 📰
ver116.mp	51 51		
, File <u>n</u> ame:	ver120.mp1		<u>O</u> pen
Files of type:	MPM upgrade file (*.MP1)	•	Cancel

The upgrade starts, and an indicator shows the progress. Typically, upgrading takes less than two minutes.

	Filename: ver120.mp1 Upgrade in progress. Please wait Step: Send code (Frame 15)	
_	Cancel	

When the upgrade is done, an Upgrade Successful message appears. Click OK. NOTE: If an Upgrade Failed. Not Responding. message appears, repeat the above steps.

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٩	Upgrade successful. In order to complete the upgrade process the monitor must be rebooted. Click the DK button below to disconnect and reboot the monitor. After 2 minutes, reconnect to this string.
	(<u> </u>

After two minutes, connect to the site by selecting the site name and clicking the Connection button.

After connection, from the String View screen, select Diagnostics|Self Test.

Enter the password. The default password is alber

After about ten seconds, the screen displays the version number of the installed firmware. Verify the firmware version is 1.23.

Click Close to exit Diagnostics. Close the String View screen to return to the String Status screen.

5.3 Clear Data Memory (MPM)

After the firmware is upgraded, you must clear the data memory in the monitor to reset the data pointers. To clear the memory, do the following:



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From the String Status screen, select the site name, then click the Connection button on the toolbar.

From the String View screen, select Diagnostics|Memory.

Enter the password. The default password is alber

Click the Clear Data Memory button.

🚀 Clear Data Memory

Click Yes when the Confirm message appears.

Confirm	×
?	All data stored in monitor will be erased. Continue?
	Yes <u>N</u> o

Click the X in the upper right corner to exit Diagnostics.

Close the String View screen to return to the String Status screen.

5.4 Send Battery Setup (MPM)

To send the battery setup to the monitor, do the following:



From the String Status screen, select the site name, then click the Connection button on the toolbar.

From the String View screen, select Setup|Battery.

Enter the password. The default password is alber

On the Battery Setup|General screen, click the Send button.

🔁 <u>S</u>end

Click the Close button to exit Battery Setup.

Close the String View screen to return to the String Status screen.

The MPM-100 upgrade process is now complete.

6 Upgrading BDS and DCM Firmware

If you have BDS Systems connected, complete this section to upgrade the BDS Controller and DCM firmware.

You may perform the upgrade from any available port, such as the RS-232, telephone or network port, but you must confirm that no other computer (PC) is communicating with the BDS Controller via a different port while you are upgrading.

6.1 Identify String Number 1 of a BDS Controller

To identify the string number of a string within a Controller, do the following:

To select a string, click a string on the String Status screen.

Select Setup|System.

Enter the password. The default password is alber

Click the String tab.

Verify the String Number field is 1. If not, repeat the above steps for the other strings on the BDS Controller until String Number 1 is identified.

Click the X in the upper right corner to return to the String Status screen

NOTE: You may only perform the upgrade while connected to String 1. (A Controller can have a maximum of eight strings connected.)

6.2 Confirm BDS Firmware Version

This section only needs to be done on string number 1 of the BDS Controller.



At this point, the BMDM String Status screen should be displayed. If not, double-click the BMDM icon to start the program.

2

Select the site name, then click the Connection button on the toolbar.

After connection, select Diagnostics|Self Test from the String Status screen.

Enter the password. The default password is alber

If the displayed Firmware Version number is 2.13 for the Controller and 2.38 for the DCM, no upgrade is needed, and you should click the X in the upper right corner to exit Diagnostics, and close the String View screen to return to the String Status screen.

If upgrade is required, do the following:

- 1. Click the X in the upper right corner to exit Diagnostics.
- 2. Close the String View screen to return to the String Status screen.
- 3. Complete the following sections.

6.3 Upgrade BDS Firmware

This section only needs to be done on string number 1 of the BDS Controller.



From the String Status screen, select the site name, then click the Connection button on the toolbar.

CAUTION: The BDS must be connected to String 1. If not, see earlier String Number section.

After connection, from the String View screen, select Setup|Upgrade Firmware. The message appears:

Confirm	×
?	In order to initiate the upgrade process, the monitor must be rebooted. Click the yes button below to disconnect and reboot the monitor. Wait 2 minutes, and then reconnect to this string. Click Setup, and then click Upgrade Firmware to continue with the upgrade process. Continue with upgrade?
	Cancel

Click Yes to start the process.



After two minutes, connect to the site again by selecting the site name and clicking the Connection button.

At the Open Upgrade File screen, select the file VER213.CTL then click Open.

Open Upgrad	e File				? ×
Look jn: 🔁	upgrade	• 🗈	<u></u>	C	
ver201.ctl					
File <u>n</u> ame:	ver211.ctl				<u>O</u> pen
Files of type:	Controller upgrade file (*.CTL)		•		Cancel //

The upgrade starts, and an indicator shows the progress. Typically, upgrading takes less than five minutes.



When the upgrade is done, an Upgrade Successful message appears. Click OK. NOTE: If an Upgrade Failed. Not Responding. message appears, repeat the previous steps.

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•	Upgrade successful. In order to complete the upgrade process the monitor must be rebooted. Click the UK button below to disconnect and reboot the monitor. After 2 minutes, reconnect to this string.
	OK]



After two minutes, connect to the site by selecting the site name and clicking the Connection button.

From the String View screen, select Setup|Upgrade DCM Firmware.

At the Open Upgrade File screen, select the file VER238.DCM then click Open.



The upgrade starts, and an indicator shows the progress. Typically, upgrading takes less than two minutes.

Filename: ver231.dcm Upgrade in progress. Please wait Step: Send code (Frame 1)
Cancel

When the upgrade is done, an Upgrade Successful message appears. Click OK.

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•	Upgrade successful.
[OK

From the String View screen, select Diagnostics|Self Test.

Enter the password. The default password is alber

After about ten seconds, the screen displays the version number of the installed BDS and DCM firmware.

Verify the BDS Controller is Version 2.13 and the DCM is Version 2.38.

Click the X in the upper right corner to exit Diagnostics.

Close the String View screen to return to the String Status screen.

6.4 Clear Data Memory (BDS)

After the firmware is upgraded, you must clear the data memory in the monitor to reset the data pointers. This section must be done for all strings connected to each BDS Controller. To clear the memory, do the following:



From the String Status screen, select the site name, and then click the Connection button on the toolbar.

From the String View screen, select Diagnostics|Memory.

Enter the password. The default password is alber

Click the Clear Data Memory button.



Click Yes when the Confirm message appears.

Confirm	×
?	All data stored in monitor will be erased. Continue?
	<u>Yes</u> <u>N</u> o

Click the X in the upper right corner to exit Diagnostics

Close the String View Screen to return to the String Status screen.

Repeat the above steps for each string.

6.5 Send Battery Setup (BDS)

This section must be done for all strings connected to each BDS Controller. To send the battery setup to the monitor, do the following:



From the String Status screen, select the site name, and then click the Connection button on the toolbar.

From the String View screen, select Setup|Battery.

Enter the password. The default password is alber

On the Battery Setup|General screen, click the Send button.

🚍 <u>S</u>end

Click Close to exit Battery Setup

Close the String View Screen to return to the String Status screen.

6.6 Perform Check Settings (BDS)

This section must be done for all strings connected to each BDS Controller. To perform Check Settings, do the following:



From the String Status screen, select the site name, then click the Connection button on the toolbar.

From the String View screen, select Setup|Check Settings.

Click the Upload button when it becomes active.

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Click Close to exit Check Settings.

Close the String View screen to return to the String Status screen.

The BDS-256 upgrade process is now complete.