Mobility DHH820-DMS
Device Management System Software
WARNING notices as used in this manual apply to hazards or unsafe practices which could result in personal injury or death.

CAUTION notices apply to hazards or unsafe practices which could result in property damage.

NOTES highlight procedures and contain information which assist the operator in understanding the information contained in this manual.

**WARNING**
POSSIBLE PROCESS UPSETS. Maintenance must be performed only by qualified personnel and only after securing equipment controlled by this product. Adjusting or removing this product while it is in the system may upset the process being controlled. Some process upsets may cause injury or damage.

**NOTICE**
The information contained in this document is subject to change without notice.

ABB Inc., its affiliates, employees, and agents, and the authors of and contributors to this publication specifically disclaim all liabilities and warranties, express and implied (including warranties of merchantability and fitness for a particular purpose), for the accuracy, currency, completeness, and/or reliability of the information contained herein and/or for the fitness for any particular use and/or for the performance of any material and/or equipment selected in whole or part with the user of/or in reliance upon information contained herein. Selection of materials and/or equipment is at the sole risk of the user of this publication.

This document contains proprietary information of ABB Inc., and is issued in strict confidence. Its use, or reproduction for use, for the reverse engineering, development or manufacture of hardware or software described herein is prohibited. No part of this document may be photocopied or reproduced without the prior written consent of ABB Inc.

**Health and Safety**

To ensure that our products are safe and without risk to health, the following points must be noted:

- The relevant sections of these instructions must be read carefully before proceeding.
- Warning labels on containers and packages must be observed.
- Installation, operation, maintenance and servicing must only be carried out by suitably trained personnel and in accordance with the information given.
- Normal safety precautions must be taken to avoid the possibility of an accident occurring when operating in conditions of high pressure and/or temperature.
- Chemicals must be stored away from heat, protected from temperature extremes and powders kept dry. Normal safe handling procedures must be used.
- When disposing of chemicals ensure that no two chemicals are mixed.

Safety advice concerning the use of the equipment described in this manual or any relevant hazard data sheets (where applicable) may be obtained from the Company address on the back cover, together with servicing and spares information.
Read First

**WARNING**

INSTRUCTION MANUALS
Do not install, maintain or operate this equipment without reading, understanding and following the proper factory supplied instructions and manuals otherwise injury or damage may result.

RETURN OF EQUIPMENT
All equipment being returned to the factory for repair must be free of any hazardous materials (acids, alkalis, solvents, etc.). A Material Safety Data Sheet (MSDS) for all process liquids must accompany returned equipment. Contact the factory for authorization prior to returning equipment.

---

Read these instructions before starting installation;
save these instructions for future reference.

---

**Contacting ABB Instrumentation…**

Should assistance be required with any of the company’s products, contact the following:

**Telephone:**
24-Hour Call Center
1-800-HELP-365

**E-Mail:**
ins.techsupport@us.abb.com

**Internet:**
www.abb.com/instrumentation

- Select your country and language from the Change Preferences drop-down menu at the top part of the page.
- Select the Customer Support link on the right side of the page and complete the requested information.
## TABLE OF CONTENTS

### READ FIRST

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 INSTALLATION</td>
<td>1-1</td>
</tr>
<tr>
<td>1.1 SYSTEM REQUIREMENTS</td>
<td>1-1</td>
</tr>
<tr>
<td>1.2 INSTALLATION REQUIREMENTS</td>
<td>1-1</td>
</tr>
<tr>
<td>1.3 DMS SERVER AND CLIENT INSTALLATION PROCEDURE</td>
<td>1-2</td>
</tr>
<tr>
<td>1.4 DMS REGISTRATION AND ACTIVATION</td>
<td>1-9</td>
</tr>
<tr>
<td>1.5 BACKUP UTILITY INSTALLATION</td>
<td>1-11</td>
</tr>
<tr>
<td>1.6 DMS DEMO INSTALLATION</td>
<td>1-12</td>
</tr>
<tr>
<td>2.0 UPGRADE FROM PREVIOUS DMS VERSIONS</td>
<td>2-1</td>
</tr>
<tr>
<td>2.1 BACKUP CURRENT DATA</td>
<td>2-1</td>
</tr>
<tr>
<td>2.2 UN-INSTALL DMS SERVER &amp; CLIENT</td>
<td>2-2</td>
</tr>
<tr>
<td>2.3 RE-INSTALL DMS CLIENT AND DPC MANAGER</td>
<td>2-2</td>
</tr>
<tr>
<td>2.4 PERFORM THE SERVER UPGRADE</td>
<td>2-3</td>
</tr>
<tr>
<td>2.5 VERIFY UPGRADE</td>
<td>2-3</td>
</tr>
<tr>
<td>3.0 DMS BACKUP INSTRUCTIONS</td>
<td>3-1</td>
</tr>
<tr>
<td>4.0 DMS RESTORE INSTRUCTIONS</td>
<td>4-1</td>
</tr>
<tr>
<td>5.0 APPENDIX A – WINDOWS XP SP2 &amp; DMS SERVER</td>
<td>5-1</td>
</tr>
<tr>
<td>6.0 APPENDIX B – WINDOWS SERVER 2003 &amp; DMS SERVER</td>
<td>6-1</td>
</tr>
<tr>
<td>7.0 APPENDIX C – WINDOWS SERVER 2003 WITH SP2</td>
<td>7-1</td>
</tr>
</tbody>
</table>
1.0 Installation

1.1 System Requirements

DMS Client/Server Stand Alone Workstation or DMS Server

Operating System: MS Windows XP Pro Edition or Windows 2003 Server
HD Memory: 500 MB
Processor: Pentium IV+ or Equivalent, 500 MHz or higher
RAM: 256 MB, 512 MB Recommended
Min. Display Resolution: 1024 x 768

DMS Client Workstation/Laptop

Operating System: MS Windows XP Pro Edition
HD Memory: 100 MB
Processor: Pentium III+ or Equivalent, 300 MHz or higher
Minimum Display Resolution: 1024 x 768

1.2 Installation Requirements

To install DMS server and pre-requisites, FULL LOCAL ADMINISTRATOR rights are required for the user logged in to the PC. If the Windows User Account doesn't allow a log in with the required rights, contact the System Administrator.

To determine whether the Windows user account allows a log in with Administrator rights:

In Windows XP:

1. Right-click the My Computer icon on the PC desktop, and choose Manage from the pop-up menu.
2. In the left pane, expand System Tools, and then click Local Users and Groups.
3. In the right pane, double-click Groups.
4. Double-click Administrators. If the account has Administrator rights, it appears in the Members section.

MS Windows Operating System Disk is required to Install Internet Information Services (IIS). If access to this software component is not available, then:

STOP NOW; DO NOT PROCEED; CONTACT THE COMPUTER SUPPORT STAFF.
1.3 DMS Server and Client Installation Procedure

DMS Server PC Software Pre-requisites:

The below items must be installed on the machine that will be running DMS Server:

1) Microsoft IIS Server 5.0 or greater – Located on the Windows XP CD as an Add-On component. Run Setup.exe on that CD, then click the Checkbox for IIS Server, and install.

2) Microsoft SQL Server 2000 or Microsoft SQL Desktop Engine (MSDE) must be installed. MSDE can be installed from the DMS Software CD. When installing SQL Server 2000, the default instance must be used for DMS server to work. The PC needs to be re-booted after installing.

Once the pre-requisites are satisfied, the DMS Server software is ready to be installed. Insert the Mobility CDROM, 3KXD311800L0041, into the PC, it should automatically startup. On the first screen press the ‘Install or upgrade – DMS Version 3.0’ button. Then on the second screen press the ‘Install DMS 3.0’ button.

NOTE: The process of installing DMS requires you to 1st install the DMS Client, then DPC Manager, and then the DMS Server.
Click "Install DMS Client" to install the DMS Client, type ABB02 into the ‘OEM Key’ field when the user information window pops up as in Figure 1.4. When the DMS Client installation completes click "Install DPC Manager". If the PC node connects to a remote DMS server PC node then you are finished, and should click “Finish”. Alternatively, if the PC is a standalone configuration, or if the PC is the DMS server node, then continue to install the DMS server by clicking "NEXT".

And then click "Install DMS Server" to continue the install of the DMS server.
A short sequence of informational dialog message boxes will be initiated at the start of the install. Wait for the following screen to popup and enter ABB02 for the OEM Key code to continue.

![Figure 1.4](image-url)

DMS requires local administrator access to the machine it is running on with its own permanent windows login account – one that does not expire and that is not changed periodically. This may require creating a local user login account with Administrator rights for DMS. If it’s already been created, just enter the information below. If not, then select “Create New User” here. The username/password and creation of this account has nothing to do with the administrator account in DMS; it is a Microsoft Windows® account that DMS uses to run background services. DMSADMIN is the default ‘Create New User’ Windows account.

![Figure 1.5](image-url)
Creating a new user:

The Domain/Server will be the name of the local machine, selectable with the browse button. The group should be "Administrators".

![Figure 1.6](image)

![Figure 1.7](image)

'Next' will finish installing the DMS server.
In the following window, click ‘Next’ if DMS is being installed on 1 PC node. Click ‘DMS Config Utility’ if DMS if the DMS server node is networked to other DMS client nodes.
Use Cases:

1) This server is a single PC with no network:
   - Leave all settings at default

2) This server is a Domain PC (Multiple DMS clients will access this machine and server is part of a large network of PC’s in a Domain where users have domain logons):
   - Use ‘Integrated’ for Connection, and default/computer name for Network Setup.

3) This server is a Workgroup PC (Multiple DMS clients will access this machine).
   - Use ‘Standard’ for connection, and default/computer name for network setup

4) This server DMS Server to be accessed remotely through internet
   - Use ‘Standard’ for connection, and use ‘Internet Address’ with the FQDN (fully qualified domain name) entered in the box.

5) This server is on a simple network of PC’s connected to a Hub/Switch and without DHCP server:
   - Use ‘Standard’ for connection, and use ‘Local IP Address’ for Network setup. You will also need static IP’s assigned to all Client PC’s.
Click ‘Load Trial Data’ and browse the Mobility CDROM to the ‘Limited Trial’ directory for unlicensed tag-limited database that is useful for trial and demonstration purposes. Alternatively, click ‘Next’ to continue with a licensed installation.

Figure 1.11

Click ‘DMS Activation Wizard’ if an activation file exists for licensing the PC node. Alternatively, click ‘Next’ and perform the activation later.

Figure 1.12
1.4 DMS Registration and Activation

NOTE: Please Skip this section if the DEMO version of DMS is installed. Activation is only for a fully licensed DMS version.

**DMS ACTIVATION Wizard**

On this computer, go to Start->Programs->Meriam Process Technologies->DMS Activation Wizard

Run the activation Wizard and click on the "Licensee Info" Tab and the following screen will appear:
1) Type in the company name, address and the name of the User responsible for maintaining the DMS server.
2) Click "Generate Profile" to get a unique HDSN Key.
3) Go to ABB’s website at http://www.abb.com/instrumentation and select
   • "Fieldbus & Tools" from the main page
   • "Hand-Held Configuration Tools" from the main page
   • "DHH810-MFT Calibrator" from the main page
   • "Mobility DMS Registration" in the “Links” section on right-side of page
4) Fill out the registration form, and a text file will be sent to the email address entered in the registration form.
5) Next, go to the “DMS Activation Tab” on the Activation/Licensing wizard, and load this file to complete registration. At this point, DMS can be logged in using the SYSADMIN account.

If there are any problems, send an email to device.support@us.abb.com.
After receiving the license file, select the "DMS Activation" Tab, and click on "Load License File to Activate DMS". Navigate to the file and open it.

The install will then be completed:

Find and launch "Device Management System" from the Programs menu on the computer: Go to Start->Programs->ABB->Device Management System

If the install and activation were both successful, then DMS can be logged in using the default username SYSADMIN and password admin.

1.5 Backup Utility Installation

It is highly recommended to install the DMS Backup Utility with the DMS Server, and use it periodically to capture a back-up of the DMS database data and settings.

To install the DMS Backup Utility run DMSBackup.exe, from the DMSUtilBackup directory on the Mobility CDROM. There are only a few simple popup windows that occur during the installation that can be easily handled by the person doing the installation.
1.6 DMS Demo Installation

To install the DMS Demo, first install the DMS Client, Server, and Backup Utility; then skip the Activation. To install the Demo version with Data:

Run the DMS Backup Utility. It should be located in Programs ->Meriam Process Technologies ->DMS Backup Utility

After the Backup Utility runs, click on the RESTORE tab:

![DMS Backup Utility](image1.png)

Click the button to browse to the DMS CD, then click on the "LIMITED_TRIAL_DATA_20_TAG_MAX" folder, then click OK:

![Browse for Folder](image2.png)

The folder will now be shown in the “Path to Backup folder”.

Now click “RESTORE”.

At this point, the Device Management System can be launched. It is located at Programs->ABB->Device Management System. To login, use the following:

username: sysadmin
password: admin

Please see the USER GUIDE for further help in using DMS
2.0 Upgrade from Previous DMS versions

Note: The following instructions are for upgrading any DMS version greater than 1.3 to DMS 3.0
After the upgrade, the SYSADMIN password will be re-set to: admin (lower case)
AND all users’ passwords will now be CASE SENSITIVE in versions greater than 1.7

2.1 Backup Current Data

Before running the DMS Upgrade, it is highly recommended to do a DMS Backup with the Backup Utility. This will back up the DMS Data and Settings for the version currently being run.

This data will be saved, but will not be needed for the Upgrade. It will only be used in case the upgrade did not work correctly.
2.2 **Un-Install DMS Server& Client**

To upgrade DMS, first un-install the DMS Server and Client. The DMS data will be retained even after the client and server are un-installed.

To un-install the DMS Server and Client:

Go to Settings->Control Panel->Add Remove Programs

Click on DMS SERVER, and then click REMOVE.

When this completes, click on DMS CLIENT, then click REMOVE.

Next, click on DPC Manager, then click REMOVE.

2.3 **Re-Install DMS Client and DPC Manager**

After un-installing the prior versions of DMS Client, and DMS Server, and DPC Manager, click Next to get to this screen:

Click "Install DMS Client" to install the Client software.
Click "Install DPC Manager" to install the DPC Manager.
2.4 Perform the Server UPGRADE

Click “Install DMS Server (Upgrade)” to start the DMS Server Upgrade.

Follow all the prompts and steps to perform the upgrade.

2.5 Verify Upgrade

DMS does not need to be activated again after an upgrade. Login now with the Sysadmin or user passwords.

*Note: After the upgrade, the SYSADMIN password will be re-set to: admin (lower case)
AND all users’ passwords will now be CASE SENSITIVE in version 2.0+*
3.0 DMS Backup Instructions

To back up DMS Data and Settings, use the DMS Backup Utility. This utility must be installed on the machine that has the DMS Server installed. If it has not yet been installed, please do so now.

Once the program is installed, follow the instructions below to back up DMS.

Before running the Backup utility, SHUT DOWN ALL DMS CLIENTS that are running.

Next, run the DMS Backup Utility:

![DMS Backup Utility](image)

**Figure 3.1**

Verify the correct Path for the backup folder. This can be changed to a different folder or drive, but it must be a local drive (Network paths will not work correctly). (The backup can be copied to a different folder later).

Click the "Backup" Button to start the backup process. This may take a few minutes depending on the size of the database.

The DMS "Backups" will be time-stamped in a folder. For example, a backup folder named DMS(04-01-04@09.25) would indicate a backup that was created on April 1st, 2004 at 9:25AM.

The backup has now completed.
4.0 DMS Restore Instructions

To restore DMS data/settings, do the following:

Note: If installing a new machine from scratch, perform the entire DMS installation guide first, and then restore the backed up DMS Data. In order to do this, the DMS Backup Utility needs to be installed.

Run the DMS Backup Utility and click on the RESTORE tab:

![DMS Backup Utility](image)

Figure 4.1

Now click the button on “Path to Backup Folder” and browse to the location of the backed up DMS Files.

Once the “Path to Backup Folder” is selected, click on “RESTORE”

The restore will take a few minutes, depending on the size of the data.

The restore should now be complete, and after logging into DMS, all of the Data/settings that were backed up should be available.
5.0 Appendix A – Windows XP SP2 & DMS Server

Installing Windows XP SP2 will cause DMS SERVER to be inaccessible. This is because all security features and options are “Turned Off” by default. Below are the steps that need to be performed AFTER installing Windows XP SP2 in order for DMS Server to work.

Note: These changes will only be made on the machine that is running the DMS SERVER. The DMS Client machines do not require any changes for SP2.

1. Click Start, click Run, type ncpa.cpl in the Open box, and then click OK.
2. Right-click the network connection that you want to configure, and then click Properties.
3. Click the Advanced tab, and then click Settings.
4. Click the Advanced tab.
5. Click Settings for the network connection.
6. Use one of the following methods, depending on your situation:
   • If IIS is configured to use port 80, click to select the Web Server (HTTP) check box. Verify that the name or the IP address is displayed correctly in the Service Settings dialog box, click OK, and then click OK again.
   • If IIS is configured to use a different port, click Add. In the Service Settings dialog box, specify the settings and the port number that you want, click OK, and then click OK again.
7. Click OK.

![Advanced Settings Window]

Figure 5.1
This step might be necessary if DNS Server is not installed in the domain:

File and Printer sharing will allow the DMS Server's machine name to be available on the Network if there is no WINS or DNS Server on the network.

Figure 5.2
6.0 Appendix B – Windows Server 2003 & DMS Server

If Microsoft Windows Server 2003 (Standard or Enterprise editions) is being used, then IIS 6.0 and also ASP.NET need to be installed. Follow the 3 steps below:

1) Go to Install/Remove windows components. To do this, go to control Panel, and then click “Add/Remove Programs”, then click on “Add/Remove WINDOWS components” which is a box on the left. Then click the Checkbox on Application Server, then click DETAILS:

![Windows Components Wizard](image)

After clicking details, enable the checkboxes for IIS Server AND ASP.NET:
Then click OK on everything to finish the install of those components.

2) Next, go to “Administrative Tools” (in Programs) and select “IIS Manager” (Internet Information Services). Click on “Web Service Extensions” on the left. Then click on “Active Server Pages” on the RIGHT pane, and click the ALLOW button if it is not already allowed:

This completes the Server 2003 instructions.
7.0 Appendix C – Windows Server 2003 with SP2

Windows Firewall and Remote Clients - If this machine is to be accessed remotely by DMS clients and you have Windows Server 2003 with Service Pack 2, you may need to add an EXCEPTION (add PORT) to the Firewall setup on your Network

1) Go into Control Panel->Network Connections->Local Area Connection (or the name of your particular connection)
2) Right-Click on the connection and Click Properties
3) Click the ADVANCED tab at the top
4) Click on the Windows Firewall SETTINGS button
5) Click the EXCEPTIONS tab at the top
6) Click the ADD PORT Button
7) For name, put IIS (or IIS server), and for Port, put 80
8) Click OK on everything.
9) Remote DMS clients should now be able to connect to this Machine

See screenshots below for example:

![Windows Firewall Exception Setup](image.png)

Figure 7.1
Edit a Port

Use these settings to open a port through Windows Firewall. To find the port number and protocol, consult the documentation for the program or service you want to use.

Name: [IS]
Port number: [80]
TCP
UDP

Change scope... OK Cancel

Figure 7.2
Contact us

ABB Inc.
Automation Technology Products
125 East County Line Road
Warminster, PA 18974-4995 USA
Tel: +1 215 674 6001
Fax: +1 215 674 7183

ABB Ltd
Howard Road, St. Neots
Cambridgeshire
PE 19 8EU UK
Tel: +44 (0)1480 475321
Fax: +44 (0)1480 217948

www.abb.com/instrumentation

Note:
We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents, in whole or in part, is forbidden without prior written consent of ABB.

Copyright © 2009 ABB
All rights reserved

Created in USA (12.09)