LX-8000 Quick Start Instructions
451-0332D

This document is intended to help you get your LX-8000 unit up and running quickly. It includes basic hardware installation, POST test information, how to obtain IP information, and how to perform a first time quick software installation. If you prefer a more detailed explanation of these procedures, refer to the *Getting Started with the LX-8000 Series* manual.

Rack-Mounting the Unit

- Do not choose a location where the unit will be exposed to direct sunlight or subjected to vibration.

- Unit must be installed in an environment with 5% to 90% humidity, noncondensing, 0° - 40° C (32°-104° F).

- Do not place an object on the side(s) of the unit that might block airflow through the unit.

- The unit may be front, rear, or center mounted.

- There is no mounting difference between the 19" and 23" rack mount ears. The 23" rackmount kit does not come standard with the LX, and must be ordered separately.

- MRV provides the following mounting screws: Eight 6-32 x 5/16" flathead screws for attaching the ears to the unit, and four 10-32 screws to attach to the rack.
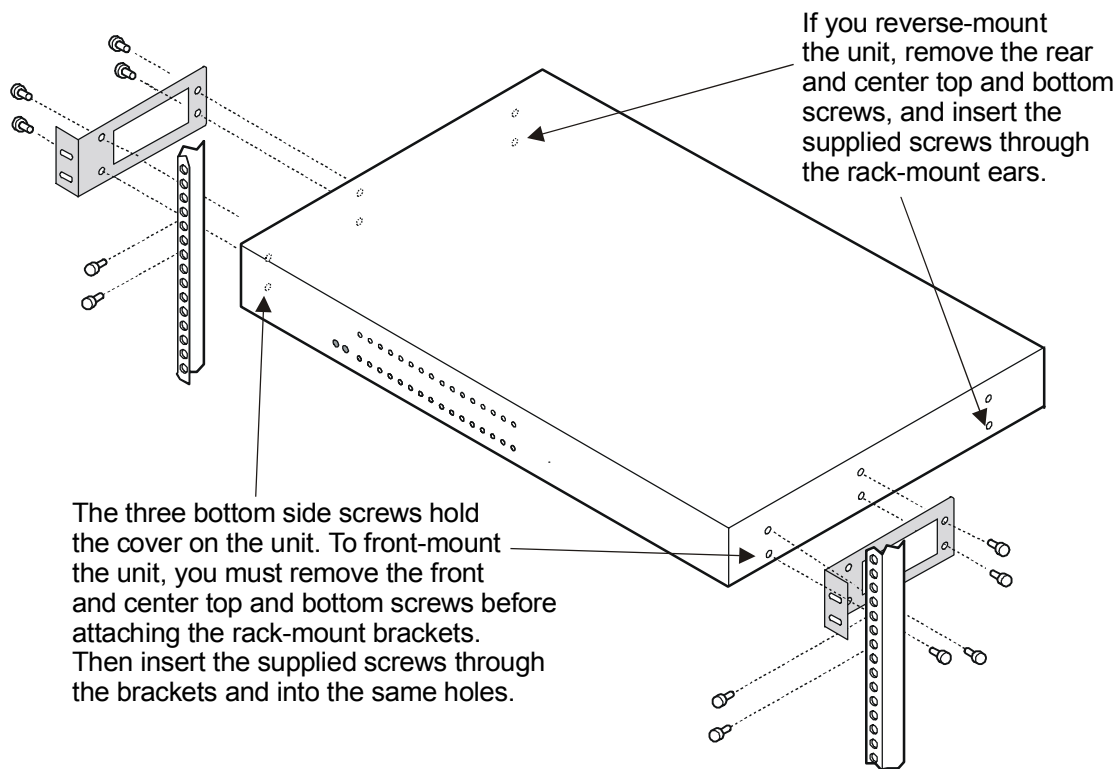

If you reverse-mount the unit, remove the rear and center top and bottom screws, and insert the supplied screws through the rack-mount ears.

The three bottom side screws hold the cover on the unit. To front-mount the unit, you must remove the front and center top and bottom screws before attaching the rack-mount brackets. Then insert the supplied screws through the brackets and into the same holes.

Figure 1 - Mounting an LX-8000 Series in Rack

Connecting Power

A grounded AC power outlet should be located within six feet of the back of the unit. Connect the power cord to rear of the unit (see Figure 2), then to an AC power outlet, and observe the front panel FLT (fault) and OK LEDs. You can use a UL-approved, 3-prong extension cord if necessary, provided it has sufficient current and voltage capacity. A line cord is supplied.

NOTE: Plug dual AC connectors A and B into separate power sources for redundance (AC connector B is optional). The LX-8000 will run with only one AC/DC power feed connected. The second input is provided for redundant system power, which is used in high reliability installations.

WARNING
⚠ Both power sources must be disconnected before servicing the unit.

Figure 2 - Connecting Power and Cabling - LX-8040 Dual AC Rear View

Connecting DC Power

<table>
<tr><td></td><td>WARNING</td></tr>
<tr><td>⚠ !</td><td>Both power sources must be disconnected before servicing the unit.</td></tr>
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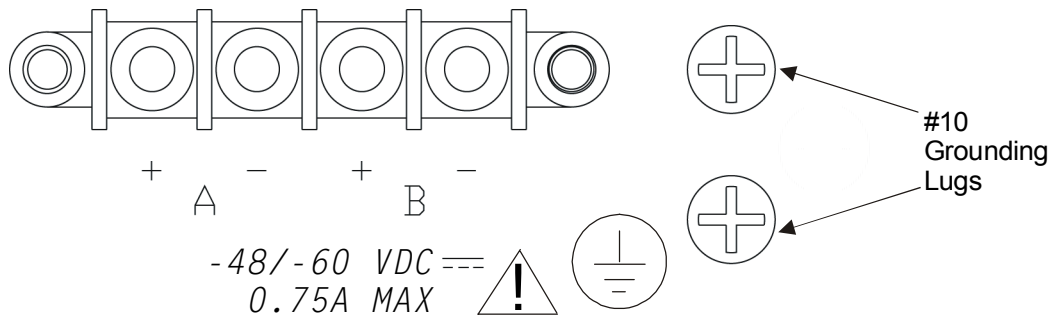This section describes how to connect power to the DC version of the LX-8000 Series.

Figure 3 - Connecting DC Power

After you have installed the LX-8000 unit, you can connect the DC power as described in the following procedure (refer to Figure 3):

1. Connect the LX-8000 to the facility's bonding network (or earth ground) using the points on the rear panel of the LX-8000. A grounding lug is required to do this. This grounding lug is not available through or provided by MRV. You can obtain it through any electrical connector supplier. The grounding lug used must have two #10 screw holes that are spaced .625 inches apart (center to center). The connection to the facility's bonding network should be made per local practices, using wire with a minimum conductor size of 18 AWG.

2. Use the two #10 screws (included) on the rear panel to secure the grounding lug to the chassis.

3. Using a ¼-inch nut driver, remove the terminal block nuts.

IMPORTANT

The Maximum Torque Rating for the Terminal Block A and B feeds is 15 in-lb.

MRV provides additional washers which are already present on each A and B feed lug. Make sure you leave the washers in place while you are attaching the A or B feed.

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4. Attach the facility's "A" feed to the terminal block labeled "A".

NOTE: Be sure that the -48VDC is connected to the *minus* side, and the 48VDC return is connected to the *plus* side.

5. Attach the facility's "B" feed to the terminal block labeled "B".

6. Replace the nuts and tighten them securely.

    The DC leads should be 22 AWG or larger. They should be terminated with a #6 ring terminal suitable for the wire AWG used.

NOTE: The LX-8000 will run with only one AC/DC power feed connected. The second input is provided for redundant system power, which is used in high reliability installations.

7. Attach the clear plastic safety guard to the terminal blocks. (The clear plastic safety guard is provided with the LX-8000 kit.)

Cabling the LX-8000 Unit

Cable the LX-8000 unit as follows (see Figure 2 and Figure 4):

·   Connect the 10/100 network cable to the 10/100 port on the rear of the unit. The LINK LED comes on steady if the cable is properly connected. Although both *ETH1* and *ETH2* are active, you can load only via *ETH1*.

·   Connect the provided serial port cable to the DIAG port (port 0), and the other end to your terminal. The DIAG port is on the front (see Figure 4).

·   Connect your serial network element devices (terminals, routers, etc.) to the async ports on the rear of the LX-8000 and power them on.
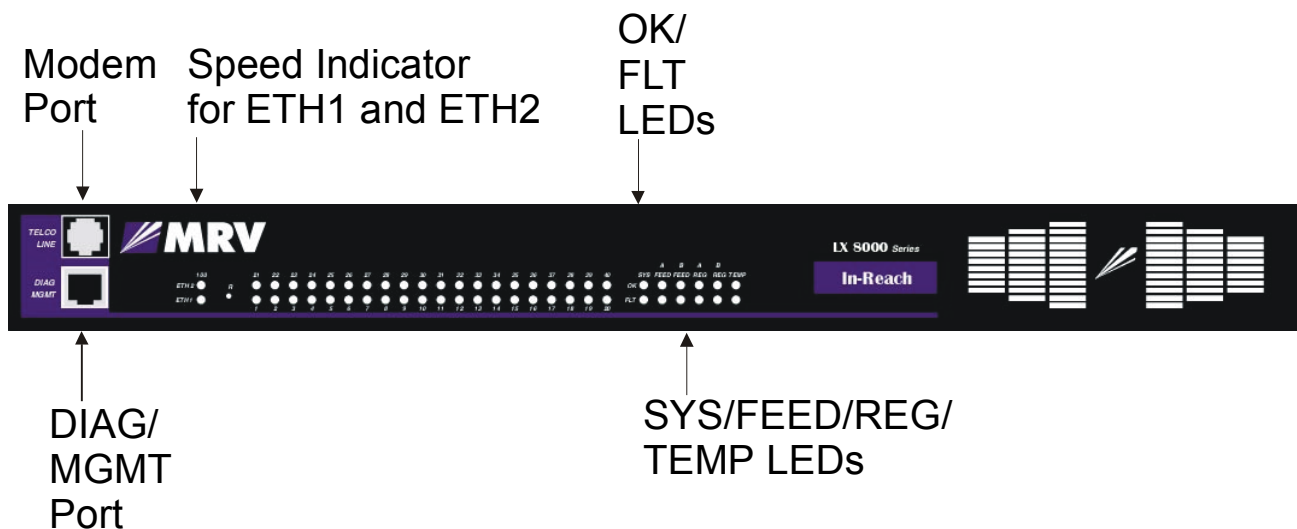

Figure 4 - DIAG Port (Port 0) and Modem Port, LX-8040 Unit Front View

POST Test

The Power On Self Test (POST) runs immediately upon startup. The port status LEDs flicker and the FLT LED remains on while the test is running (this may take only a few seconds). If the unit passes the POST test, the FLT LED extinguishes, and the OK LED turns green. If there is a failure, the FLT LED stays on, and the port status LEDs begin flashing an error code. Refer to *Getting Started with the LX-8000 Series* for an explanation of the codes.

Obtaining IP Information

The LX is an intelligent unit; by default the LX attempts to obtain IP information via the DHCP, BOOTP, or RARP loading methods (you can load only via *ETH1*). If you choose to use these methods, a DHCP, BOOTP, or RARP server must also be configured on the network to support the LX-8000 unit, as needed. Otherwise, you can manually configure an IP address. Refer to *Getting Started with the LX-8000 Series* or to *LX-Series Configuration Guide* for further information.

You must first cable the unit according to the instructions in this document or in *Getting Started with the LX-8000 Series*.

First Time Quick Configuration

NOTE: Quick configuration runs only at default parameters on the DIAG port (port 0) on all models when booting from default parameters.

NOTE: Display problems may occur during bootup when you attach a terminal to the DIAG port (port 0) and the display setup is configured to `Smooth-2 Scroll`. To avoid this, change the scroll setting to `Jump Scroll`.

Use the following procedure to configure your LX-8000 unit for the first time.

1. Plug in the terminal at the DIAG port (port 0 - port values are 9600 bps, eight data bits, one stop bit, no parity, and Xon/Xoff flow control). The Main Menu appears and starts loading from defaults after eight seconds. If you need to return to the Main Menu, unplug the terminal at the DIAG port and plug it in again.

2. Press b to boot the LX-8000 unit. The setup takes a minute or two. The "`The unit has loaded to factory defaults, would you like to run Initial Connectivity Setup? y/n`" message appears.

3. Press y (yes) and press Enter. The "`Enter your superuser password`" message appears, followed by the Superuser Password prompt.

4. Enter the superuser password **system**. The Quick Configuration menu appears:

```
       Quick Configuration menu

               1 Unit IP address                10.80.1.1

               2 Subnet mask                  255.255.255.0

               3 Default Gateway

               4 Domain Name Server

               5 Domain Name Suffix

               6 Cluster Secret                 Configured

               7 Superuser Password           Not Changed

               8 Exit and Save

       Enter your choice:
```

5. Press the number corresponding to the parameter you want to set.

6. Enter the appropriate information and press Enter to return to the Quick Configuration menu. Once you enter a parameter value, a data entry line specific to that parameter appears on the Quick Configuration menu.

7. Continue in this way through the menu, configuring as many parameters as you want. You are not required to configure all parameters.

NOTE: You should change the Superuser Password, since this is the first time you are configuring the LX-8000 unit (the default password is system). Login username and password are case-sensitive.

8. Press 8 (Exit and Save) to save your changes. The "Is this information correct?" message appears.

```
       CONFIGURATION SUMMARY

            1 Unit IP address                    10.80.1.5

            2 Subnet mask                        255.0.0.0

            3 Default Gateway

            4 Domain Name Server

            5 Domain Name Suffix

            6 Cluster Secret                     Configured

            7 Superuser Password                 Not Changed

            8 Exit and Save

       Is this information correct?  (y/n) :
```

9. Press y (yes) and press Enter. The "Save this information to flash?" message appears.

10. Press y (yes) and press Enter. The information is saved to flash.

11. Press Enter several times to display the Login: prompt. You can now use the LX-8000 unit.

You can access the LX-8000 via the Graphical User Interface (GUI) by typing the unit's IP address in your browser. Refer to *Getting Started with the LX-8000 Series* for more information on how to access the GUI.

Configuring Server Parameters

The ports on the unit are set to factory defaults. For example, all async ports are set to 9600/8/1/None, with access remote, xon flow control, and terminal type ANSI. You can change them from the defaults if you want by connecting to the DIAG port (port 0). This port is set for local access.

Changing the Defaults via the CLI

To change the defaults via the CLI:

1. Enter the default login username (InReach).

2. Enter the default login password (access).

3. At the In-Reach:0> prompt, enter enable. The Password: prompt appears.

4. Enter `system` or your new Admin password that was set in the Quick Configuration menu. The Superuser `In-Reach:>>` prompt appears.

5. Enter `config` and press Enter. The Configuration prompt `Config:0>>` appears.

6. Enter `port  async  1`. The `Async  1-1:0>>` prompt appears, so you can change port 1 parameters.

7. Press `?` or `<TAB>`. The `Port Async  Commands` list appears. Here you can modify any of the default port parameters you want.

8. When you are finished making changes, enter `end` to return to the `In-Reach:>>` prompt.

9. To save your configuration, enter the command `save configuration flash`.

Changing the Defaults via the Graphical User Interface

At the **Configuration Console** window, select **Ports: Async**. Should you need to make changes to the Async window, select the **Admin** button at the top of the **Configuration Console** window and then enter the Superuser Login Password, then select **Ports: Async**. The Async window appears. Here you can modify any of the port default parameters you want. Refer to *Getting Started with the LX-8000 Series* for more information on the Graphic User Interface (GUI).