Installation Guide

for Uplogix Local Managers

Version 5.1

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Uplogix, Inc.

7600-B North Capital of Texas Highway

Suite 220

Austin, Texas 78731

USA

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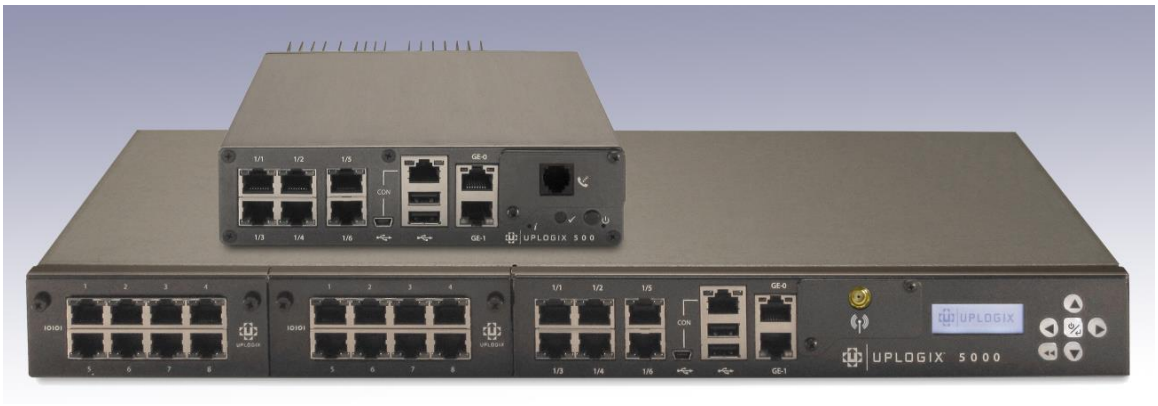
About this guide

This guide describes the procedures for installing, cabling, and provisioning Uplogix Local Managers.



Information in this document is subject to change without notice. Please visit www.uplogix.com/support for the latest updates to Uplogix product documents.

Target audience

This guide is for trained, qualified network support technicians responsible for installing the Uplogix Local Manager.

Typographical conventions

The following conventions are used in this guide.

Sample text from the command line interface is presented in `this font`. Text that you enter is presented in **`this font`**. For example:

```
[admin@UplogixLM]# show who

admin ssh Mar 22 13:38 (192.0.2.101)
```

Keyboard characters are enclosed in angle brackets. For example, press <Enter>.

Safety summary

Following all cautions and warnings will ensure your own safety and protect the Uplogix Local Manager from potential damage or loss of data.

Caution: Read the installation instructions before connecting the Uplogix Local Manager to a power source.

Read and understand the following instructions before using the Uplogix Local Manager:

- Always disconnect the Uplogix Local Manager from power before cleaning and servicing.
- Do not spray liquids directly onto the Uplogix Local Manager when cleaning. Always apply the liquid first to a static free cloth.
- Do not immerse the Uplogix Local Manager in any liquid or place any liquids on it.
- Do not disassemble the Uplogix Local Manager. There are no user serviceable parts inside the chassis, return to Uplogix for repair.

AC Models

- Use three wire electrical extension cords with a current rating equal to or greater than your Uplogix Local Manager's current rating.
- Only connect the Uplogix Local Manager to surge-protected power outlets.

DC Models

- Use the supplied power cable (UP610052) with Molex connector and three-wire split out to connect the DC Local Manager to power.
- Ensure proper connections are made to earth ground, positive voltage and power return by a qualified electrician. See Making the connections required for initial configuration for more information.

SAVE THESE INSTRUCTIONS.

Uplogix 500/5000 Local Managers

The Uplogix Local Manager is a management device that connects directly to managed network devices and servers.

Uplogix 500

The Uplogix 500 is a small form factor Local Manager offering a fixed set of console ports for connection to managed devices.

There are six serial ports that can be connected to managed devices. One port is dedicated for connection to an intelligent power controller.

Uplogix 5000

The Uplogix 5000 may be customized by installing expansion cards in the two modular bays.

Each expansion bay can be used to add either 4, 8 or 16 serial ports or eight dedicated Ethernet ports, for pairing with serial ports, when direct Ethernet connections are needed for managed devices.

Hardware installation

Ensure that the power source:

- Provides appropriate power, AC or DC, as required by the system.
- Provides overload protection
- Is connected to earth ground

Warning: The power source must meet all these requirements to ensure safe and reliable operation.

Ensure that the installation site meets the requirement that the ambient temperature does not exceed 113° F (45° C) or fall below 32°F (0°C).

Caution: The unit will overheat if the site does not meet these requirements.

Caution: Use only the power supply shipped with the Local Manager 500. Using a different power supply will void your warranty and may damage the equipment.

Installing the Uplogix 500 Local Manager

Uplogix 500

This section includes:

- Unpacking the shipping box
- Installing optional equipment
- Installing the chassis
- Making the connections required for initial configuration
- Making the remaining connections

Unpacking the shipping box

Verify that you have received the following items:

- Uplogix 500 Local Manager
- 1 Power supply and cord
- 1 mounting bracket
- 1 DB-9 to RJ-45 serial adaptor
- Screws
- Four clear rubber bumpers

Installing optional equipment

The Uplogix 500 supports field-installable modems, small form factor pluggable (SFP) modules, and a temperature and humidity sensor. The Uplogix 500 also supports a 2-bracket kit for center-mounting. Optional equipment may ship separately from the Local Manager.

Installing an Option Card in the Option Slot

The Local Manager supports five styles of equipment for installation in the option slot: V.92 modem, GPRS cellular modem, CDMA cellular modem, a DB-9 connection for an external modem, and a SFP module to support a fiber connection.

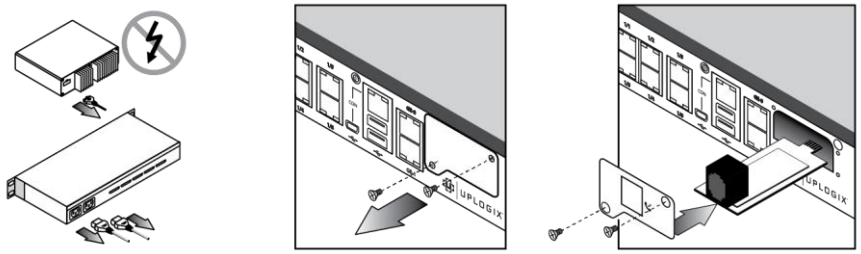
Caution: To prevent equipment damage, do not connect the internal modem to digital PBX systems, VoIP analog terminal adapters, or cellular modems. It is designed for use with analog telephone lines only. Uplogix is not responsible for damage caused from attaching the modem to a digital phone switch.

Prior to installation of any option slot card, ensure that the Local Manager is powered off.

V.92 modem

The V.92 modem may already be installed in the option slot. Follow these steps if the V.92 modem is not already installed:

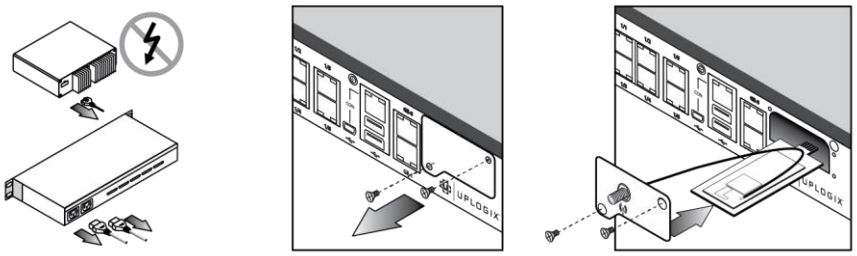
1. Power off the Local Manager.
2. Remove the option slot cover, align the modem carrier card with the internal rails, and slide the modem into place.
3. Replace the screws.
4. Connect a POTS telephone line to the RJ-11 jack on the modem and power on the Local Manager.



GPRS cellular modem

Follow these steps to install the GPRS cellular modem:

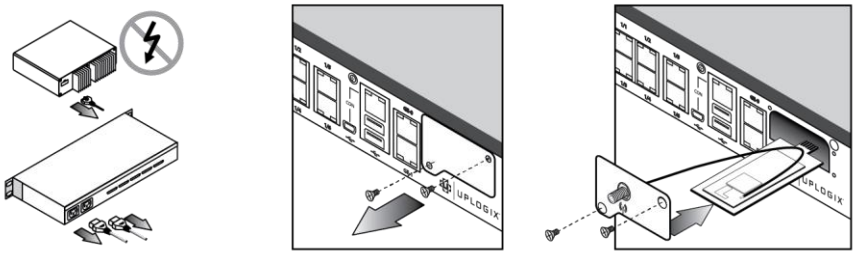
1. Power off the Local Manager.
2. Install an activated SIM card on the modem.
3. Remove the option slot cover, align the modem carrier card with the internal rails, and slide the modem into place.
4. Feed wire into the option slot compartment, align modem cover plate with the option slot screw holes, and replace the screws.
5. Install antenna.
6. Power on the Local Manager.



CDMA cellular modem

Follow these steps to install the CDMA cellular modem:

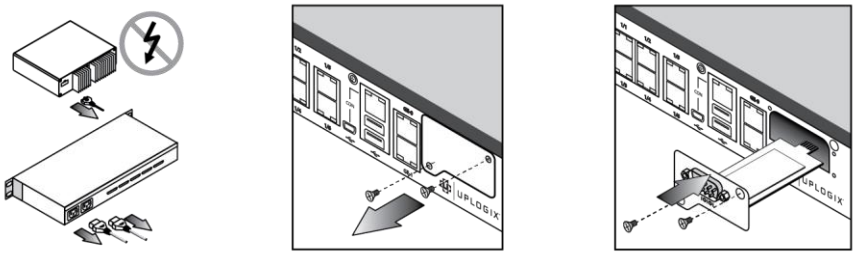
1. Power off the Local Manager.
2. Note the Electronic Serial Number (ESN) on the modem, as this will be needed in order to activate the modem on your carrier's network.
3. Remove the option slot cover, align the modem carrier card with the internal rails, and slide the modem into place.
4. Feed wire into the option slot compartment, align modem cover plate with the option slot screw holes, and replace the screws.
5. Install antenna.
6. Power on the Local Manager.



DB-9 option card for external modem

The DB-9 option card may already be installed in the option slot. Follow these steps if the DB-9 option card is not already installed:

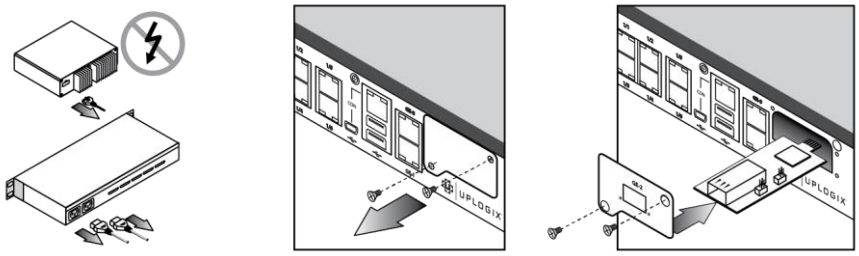
1. Power off the Local Manager.
2. Remove the option slot cover, align the modem carrier card with the internal rails, and slide the modem into place.
3. Replace the screws.
4. Connect an external modem to the Local Manager using a serial DB-9 cable and power on the Local Manager.



Installing an SFP module

Follow these steps to install the SFP module in the chassis option slot of the Local Manager:

1. Power off the Local Manager
2. Remove the option slot cover, align the carrier card with the internal rails, and slide the module into place.
3. Replace the screws.
4. Install either a 1000Base SX (GLC-SX-MM) SFP or the 1000Base LX/LH (GLC-LH-SM) SFP for fiber connectivity. Both the 1000Base SX (GLC-SX-MM) SFP and the 1000Base LX/LH (GLC-LH-SM) SFP are customer-provided equipment.



Note: SFP modules are hot swappable, but the SFP carrier option card is not hot swappable.

Installing a Temperature and Humidity Sensor

The Local Manager supports a USB-connected temperature and humidity sensor. Follow these steps to connect the sensor. Note the Local Manager does not need to be powered down for installation of this sensor.

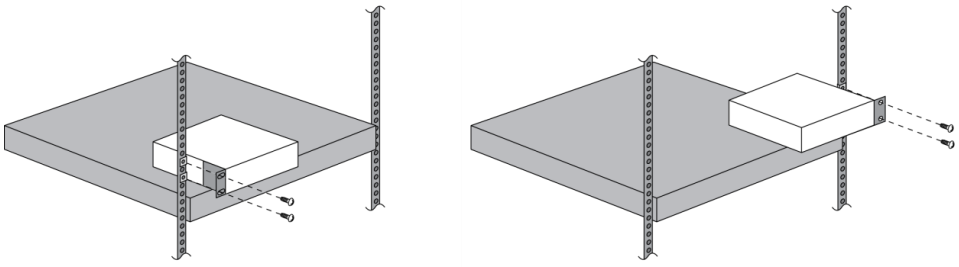
1. Plug the sensor into one of the two USB connections on the Local Manager
2. Place sensor collection end in the area you wish to collect environmental information, ideally not near a fan or on hot equipment.

It may take up to 10 minutes for the sensor to normalize to the environmental temperature and begin reporting consistent data.

Installing the chassis

The Local Manager is designed to be mounted in a rack or placed on a tabletop. To mount the Local Manager in a rack:

1. Use the screws provided to attach the mounting bracket.
2. The mounting bracket can be installed on either side of the Uplogix 500.
3. Mount the Local Manager in the rack.



Left Mount

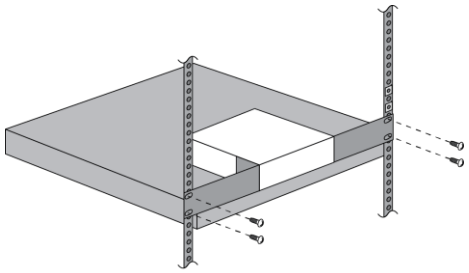
Right Mount

Installing optional center-mounting kit

Uplogix sells an optional kit for center-mounting the Uplogix 500.

To mount the Local Manager with the center-mount kit in a rack:

1. Attach the mounting brackets.
2. Mount the Local Manager in the rack.

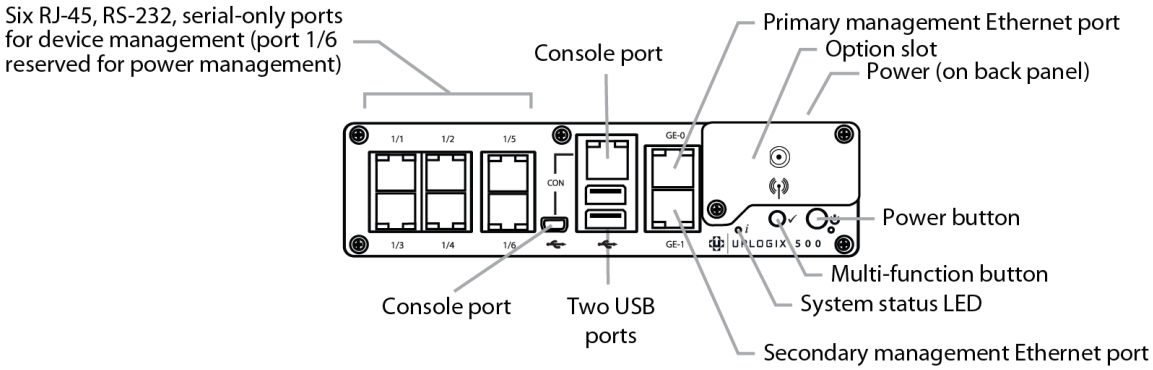


Center Mount

Making the connections required for initial configuration

To complete initial setup, you must make these connections:

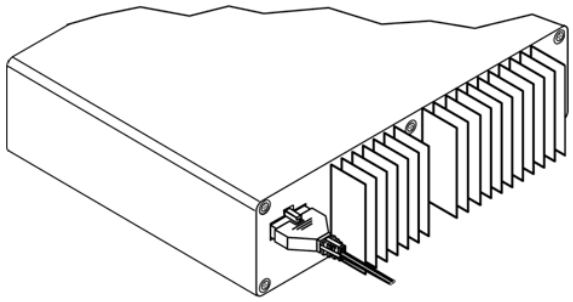
- Power
- Console



Connecting power

The Uplogix Local Manager uses an external power supply, which is shipped with the device.

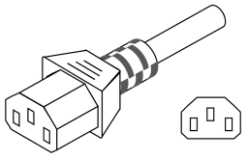
Caution: Use only the power supply shipped with the Local Manager 500. Using a different power supply will void your warranty and may damage the equipment.



Uplogix 500 power connection

Connect the power supply to the DC connector on the back of the device.

Connect the power cord to the power supply. Use either the provided power cord or one that is suitable for your location. The Uplogix Local Manager uses a power cord with a standard IEC-320-C13 female cord end.

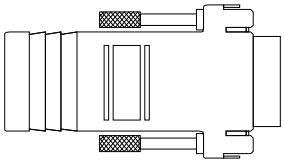


Connect the power cord to a power outlet. An amber light indicates that the unit has power applied. Power on the unit by pressing the power button. The system status LED (denoted with an 'i' label on the chassis) will blink while the Local Manager boots up and becomes a solid green light when the boot sequence is complete.

Connecting a workstation

To complete initial setup, you must connect your workstation to the Local Manager's RJ-45 console port.

- If your workstation has a DB-9 serial port, use the DB-9 to RJ-45 adaptor provided by Uplogix (see diagram below) and a straight Ethernet cable to connect to the console port.
- If your workstation does not have a DB-9 serial port, you will need to use a USB to DB-9 serial adaptor together with a straight Ethernet cable and the DB-9 adaptor provided by Uplogix to connect to the console port.



The default settings for the console port are 9600, 8, N, 1.

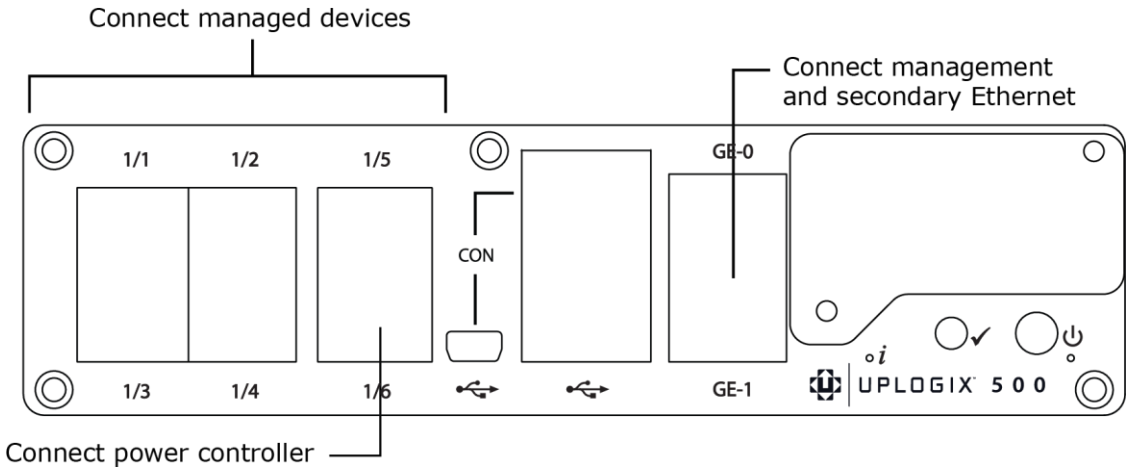
Note: The mini-USB console port will be supported in a future software release.

Following initial setup, you may choose to disconnect the console cable and manage the Local Manager via Ethernet.

Making the remaining connections

These connections are not required to complete the initial setup:

- Power controller
- Management Ethernet
- Devices to be managed



Connecting a power controller

Connect the power controller's serial port to port 1/6 on the Local Manager. A straight Ethernet cable is typically used for this connection. However, some power controllers require special cables. Consult your power controller documentation if a straight Ethernet cable does not work.

Connecting management Ethernet

To manage the Local Manager and attached devices in-band through the network, connect Gigabit Ethernet port 0 (GE-0) on the front panel to your network using a straight Ethernet cable. Both GE-0 and GE-1 auto negotiate their speed and duplex settings by default.

Alternatively, if your management network is fiber based, connect to the SFP in the option slot. If GE-0 or GE-1 are connected to the network, they will take precedence over the fiber connection.

When connected, secondary management Ethernet port GE-1 acts as a standby redundant Ethernet management connection by default. GE-1 will become active if the GE-0 link drops. Therefore, it is important that GE-0 and GE-1 be connected to switch ports in the same network or VLAN.

Connecting devices to be managed

Connect the console ports of up to five devices to the five serial ports (1/1 through 1/5) on the Local Manager. A straight Ethernet cable works for most devices, but some devices do require a rolled cable or a cable with a non-standard pin out. Consult your managed device's documentation for console port serial setting and pin out information as necessary.

Note: If port 1/5 on your Local Manager is labeled as '1/5-DTE', you will likely need to use a rolled cable to connect this port to a managed device.

Installing the Uplogix 5000 Local Manager

Uplogix 5000

This section includes:

- Unpacking the shipping box
- Installing optional equipment
- Expansion cards
- Ethernet expansion card port mapping
- Installing or replacing an expansion card
- Installing the chassis
- Making the connections required for initial configuration
- Making the remaining connections
- Removing an expansion card that will not be replaced

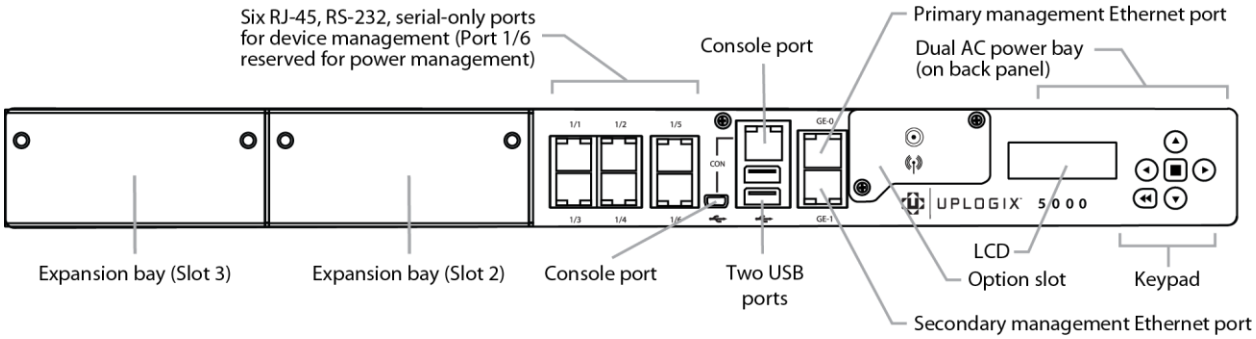
Unpacking the shipping box

Verify that you have received the following items:

- Uplogix 5000 Local Manager
- 2 US power cords (AC unit) or 2 Molex to 3-wire power cords (DC unit)
- 2 rack mounting brackets
- 1 DB-9 to RJ-45 adapter
- Screws

Installing optional equipment

The Uplogix 5000 supports field-installable modems, small form factor pluggable (SFP) modules, and a temperature and humidity sensor. Optional equipment may ship separately from the Local Manager.



Installing an Option Card in the Option Slot

The Local Manager supports five styles of equipment for installation in the option slot: V.92 modem, GPRS cellular modem, CDMA cellular modem, a DB-9 connection for an external modem, and a SFP module to support a fiber connection.

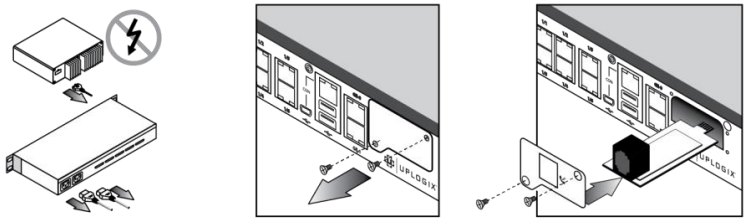
Caution: To prevent equipment damage, do not connect the internal modem to digital PBX systems, VoIP analog terminal adapters, or cellular modems. It is designed for use with analog telephone lines only. Uplogix is not responsible for damage caused from attaching the modem to a digital phone switch.

Prior to installation of any option slot card, ensure that the Local Manager is powered off.

V.92 modem

The V.92 modem may already be installed in the option slot. Follow these steps if the V.92 modem is not already installed:

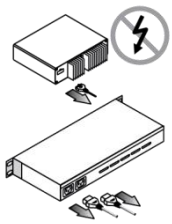
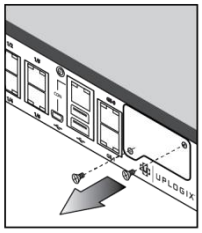
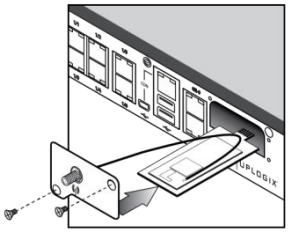
1. Power off the Local Manager.
2. Remove the option slot cover, align the modem carrier card with the internal rails, and slide the modem into place.
3. Replace the screws.
4. Connect a POTS telephone line to the RJ-11 jack on the modem and power on the Local Manager.



GPRS cellular modem

Follow these steps to install the GPRS cellular modem:

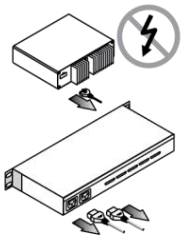
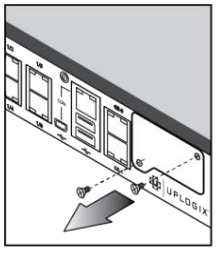
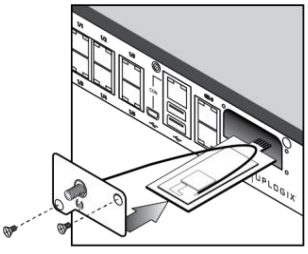
1. Power off the Local Manager.
2. Install an activated SIM card on the modem.
3. Remove the option slot cover, align the modem carrier card with the internal rails, and slide the modem into place.
4. Feed wire into the option slot compartment, align modem cover plate with the option slot screw holes, and replace the screws.
5. Install antenna.
6. Power on the Local Manager.

CDMA cellular modem

Follow these steps to install the CDMA cellular modem:

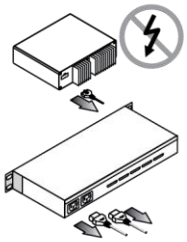
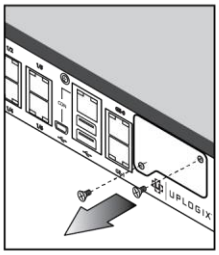
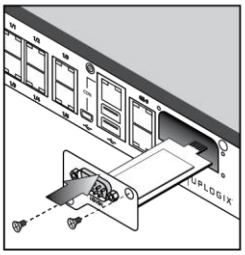
1. Power off the Local Manager.
2. Note the Electronic Serial Number (ESN) on the modem, as this will be needed in order to activate the modem on your carrier's network.
3. Remove the option slot cover, align the modem carrier card with the internal rails, and slide the modem into place.
4. Feed wire into the option slot compartment, align modem cover plate with the option slot screw holes, and replace the screws.
5. Install antenna.
6. Power on the Local Manager.

DB-9 option card for external modem

The DB-9 option card may already be installed in the option slot. However, follow these steps if the DB-9 option card is not already installed:

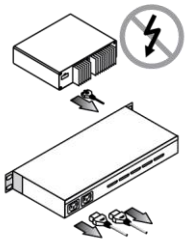
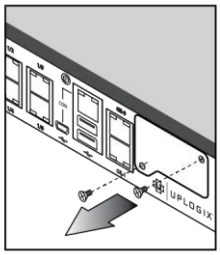
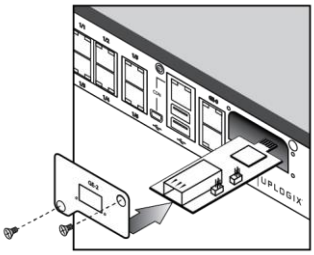
1. Power off the Local Manager.
2. Remove the option slot cover, align the modem carrier card with the internal rails, and slide the modem into place.
3. Replace the screws.
4. Connect an external modem to the Local Manager using a serial DB-9 cable and power on the Local Manager.

Installing an SFP module

Follow these steps to install the SFP module in the chassis option slot of the Local Manager:

1. Power off the Local Manager
2. Remove the option slot cover, align the carrier card with the internal rails, and slide the module into place.
3. Replace the screws.
4. Install either a 1000Base SX (GLC-SX-MM) SFP or the 1000Base LX/LH (GLC-LH-SM) SFP for fiber connectivity. Both the 1000Base SX (GLC-SX-MM) and the 1000Base LX/LH (GLC-LH-SM) are customer provided equipment.

Note: SFP modules are hot swappable, but the SFP carrier option card is not hot swappable.

Installing a Temperature and Humidity Sensor

The Local Manager supports a USB-connected temperature and humidity sensor. Follow these steps to connect the sensor. Note the Local Manager does not need to be powered down for installation of this sensor.

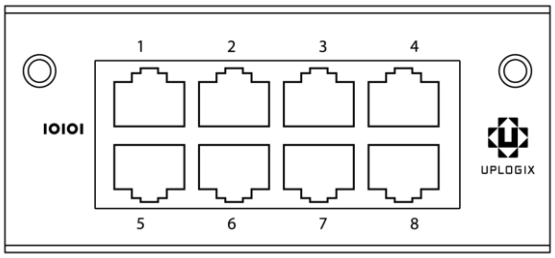
1. Plug the sensor into one of the two USB connections on the Local Manager
2. Place sensor collection end in the area you wish to collect environmental information, ideally not near a fan or on hot equipment.

It may take up to 10 minutes for the sensor to normalize to the environmental temperature and begin reporting consistent data.

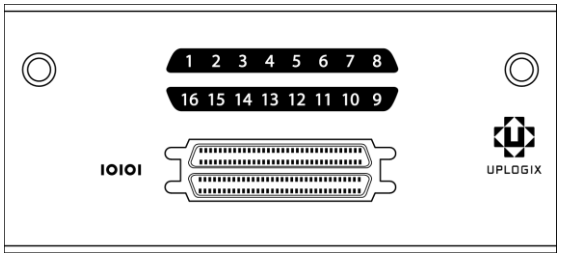
Expansion cards

The Uplogix 5000 may be customized by adding additional ports through the two modular expansion bays. The leftmost bay is designated slot 3 in the system and the rightmost bay as slot 2. Each expansion bay can be used to add 4, 8, or 16 serial ports or 8 dedicated Ethernet ports. Dedicated Ethernet ports are paired with serial ports to enhance management capabilities for some devices.

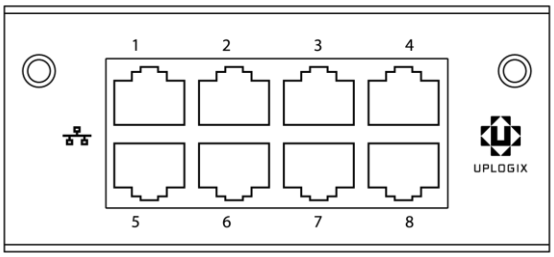
Sample 8 Port Serial Card:



Sample 16 Port Serial Card:



Sample 8 Port Dedicated Ethernet Card:

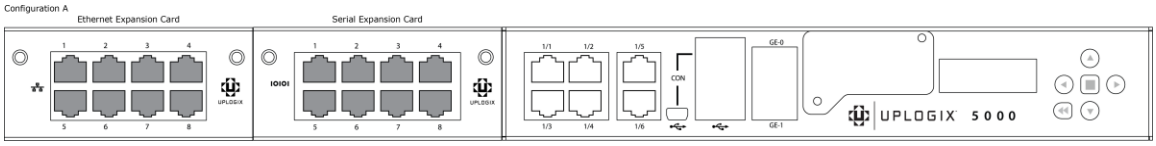


Ethernet expansion card port mapping

Dedicated Ethernet ports are used to make a direct Ethernet connection between the Local Manager and a managed device. For instance, the Local Manager can use Ethernet to move configuration and software image files back and forth between it and its managed devices. Dedicated Ethernet ports are always paired with serial ports in the system. The placement of an Ethernet expansion card in the system will determine which serial ports map to its Ethernet ports.

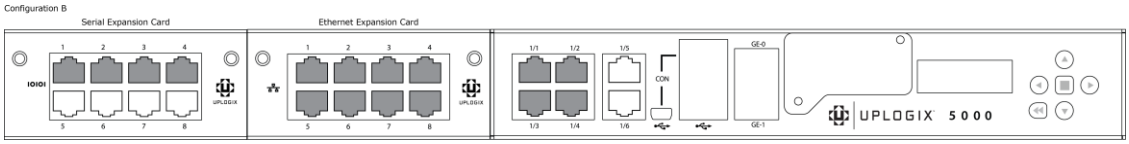
Configuration A: One Ethernet expansion card, one serial expansion card

When an 8 or 16 port serial expansion card is installed in the right expansion bay (slot 2) and an 8 port Ethernet expansion card is installed in the left expansion bay (slot 3), the 8 dedicated Ethernet ports in slot 3 are paired with the first 8 serial ports (ports 2/1 to 2/8) in slot 2.



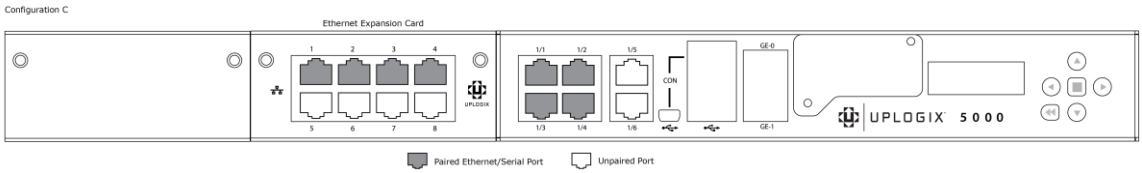
Configuration B: One serial port expansion card, one Ethernet expansion card

When an 8 port Ethernet expansion card is installed in the right expansion bay (slot 2) and an 8 or 16 port serial expansion card is installed in the left expansion bay (slot 3), the first four dedicated Ethernet ports are paired with the first four fixed serial ports (ports 1/1 thru 1/4). The remaining Ethernet ports (ports 5-8) are paired with the first four serial ports on the serial port expansion card (ports 3/1 to 3/4).



Configuration C: One Ethernet expansion card, no serial expansion card

When an 8 port Ethernet expansion card is installed in the right expansion bay (slot 2), the first four Ethernet ports are paired with the first four fixed serial ports (ports 1/1 to 1/4). The remaining fixed serial port (port 1/5) is not paired with a dedicated Ethernet port.



Installing or replacing an expansion card

Use the following procedure to install or replace an expansion card.

Caution: Always power off the Local Manager before installing or removing expansion cards.

If you purchase an additional expansion card for the Uplogix 5000 Local Manager, install it as follows:

1. Power off the Local Manager.
2. Using a #2 Philips screwdriver, loosen the module screws securing the blank faceplate or the option card to be replaced and remove it.
3. Slide the new or replacement option card into place. Ensure the two module retention screws are threaded into the faceplate of the card. The screws will align to holes in the chassis if the screws are slightly backed out of the front panel.

   Note: Installing the option card with the screws fully engaged makes it difficult to install the card properly.
4. Look inside the chassis and find two tabs close to the front of the option slot and two located further back. Place the rear edge of the card on the two front tabs, tilt the card up and slide it back so the card edges slide below the two rear tabs. Gently push the card back until the card seats in the connector on the backplane.

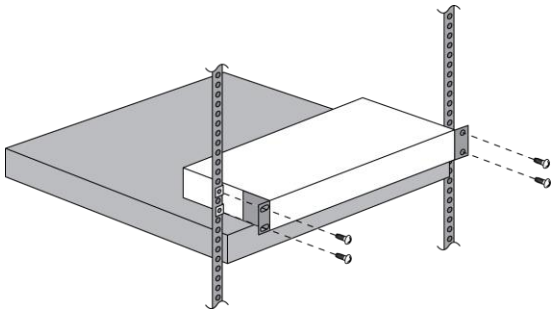
   Caution: If it is difficult to slide the card or if the card resists being properly seated, the card is probably not installed correctly. Remove the card and start over. Very little force is required to install the cards.
5. Tighten the module retention screws to ensure that the internal connector seats properly.

   Caution: Over tightening the screws may strip the threads and is not required; finger tight is sufficient. As you install the retention screws, you may encounter some resistance. If needed, use a #2 Philips screwdriver to overcome this resistance but use care not to cross thread or strip the screw.
6. If you are installing a 16 port serial card, attach the supplied octopus cable to the connector on the front of the card.

Installing the chassis

The Local Manager is designed for rack mounting using a two-point mounting system.

1. Use the screws provided to attach the mounting brackets.



2. Mount the Local Manager in the rack.

Making the connections required for initial configuration

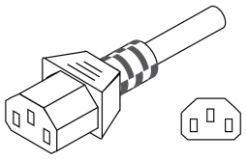
To complete initial setup, you must make this connection:

- Power

Connecting power

AC Models

Connect the power cord to the Local Manager. Use either the provided power cord or one that is suitable for your location. The Uplogix Local Manager uses a power cord with a standard IEC-320-C13 female cord end.



Connect the power cord to a power outlet. A dimly lit keypad and dark display indicates that the unit has power applied. Power the unit on by pressing the middle keypad button. The display on the front panel will illuminate and display progress messages as the device boots. At the end of the boot sequence, it displays the message `Uplogix status good`.

DC Model

Available on the Uplogix 5000 only. The DC Uplogix Local Manager uses a power cord with a Molex connector (part number: 39-01-4041) end and a three-wire split out.

Caution: Use the provided power cables to have an electrician connect the Local Manager to the DC power source

Connect the green yellow wire to earth ground, connect the brown wire to positive voltage and then connect the blue wire to power return. A dimly lit keypad and dark display indicates that the unit has power applied. Power the unit on by pressing the middle keypad button. The display on the front panel will illuminate and display progress messages as the device boots. At the end of the boot sequence, it displays the message `Uplogix status good`.

Description	Wire Color	Operating Voltage Range (Referenced to Earth Ground)	Operating Voltage Range (Referenced to Return)
Earth Ground	Green with Yellow Stripe	0 V	NA
Positive Voltage	Brown	0 – 60 V	24 – 60V
Return	Blue	-60 – 0 V	NA

Making the remaining connections

These connections are not required to complete the initial setup:

- Power controller
- Connecting management Ethernet
- Connecting devices to be managed
- Serial expansion card
- Ethernet expansion card
- Connecting a workstation

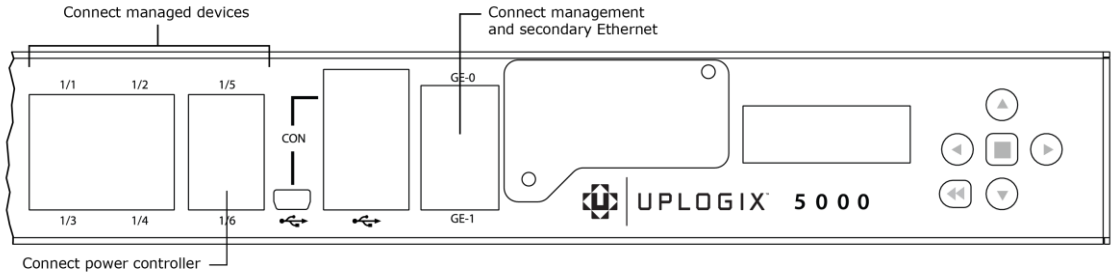
Connecting a power controller

Connect the power controller's serial port to port 1/6 on the Local Manager. A straight Ethernet cable is typically used for this connection. However, some power controllers require

special cables. Consult your power controller documentation if a straight Ethernet cable does not work.

Connecting management Ethernet

To manage the Local Manager and attached devices in-band through the network, connect Gigabit Ethernet port 0 (GE-0) on the front panel to your network using a straight Ethernet cable. Both GE-0 and GE-1 auto negotiate their speed and duplex settings by default.



When connected, secondary management Ethernet port GE-1 acts as a standby redundant Ethernet management connection by default. GE-1 will become active if the GE-0 link drops. Therefore, it is important that GE-0 and GE-1 be connected to switch ports on the same network or VLAN.

If your management network is fiber based, connect to the SFP in the option slot. If GE-0 or GE-1 are connected to the network, they will take precedence over the fiber connection.

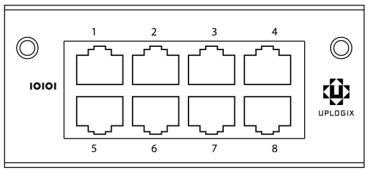
Connecting devices to be managed

Connect the console ports of network devices to the serial ports on the Local Manager. A straight Ethernet cable works for most devices, but some devices do require a rolled cable or a cable with a non-standard pin out. Consult your managed device documentation for console port serial setting and pin out information as necessary. Depending upon configuration of your Local Manager, optional Ethernet connections may also be available for managed devices.

Note: Ensure that RJ45 or RJ11 connectors used to connect devices to the Uplogix have a locking tab and that the connector is installed in the proper orientation.

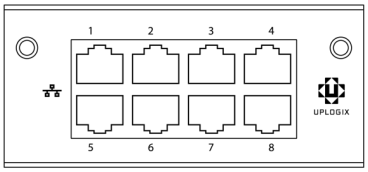
Connecting managed devices to a serial expansion card

Connect the console ports of up to five network devices to the first five serial ports (1/1 through 1/5) on the Local Manager. Connect the console ports of up to 8 or 16 additional network devices to the serial ports on the expansion card.



Connecting managed devices to an Ethernet expansion card

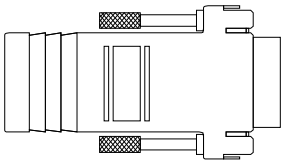
Connect management Ethernet ports of up to eight network devices to the eight Ethernet ports on the expansion card.



Connecting a workstation

To complete initial setup, connect your workstation to the Local Manager's RJ-45 console port. If you wish to utilize the keypad to configure network settings on the Local Manager, skip this step.

- If your workstation has a DB-9 serial port, use the DB-9 to RJ-45 adaptor provided by Uplogix (see diagram below) and a straight Ethernet cable to connect to the console port.
- If your workstation does not have a DB-9 serial port, you will need to use a USB to DB-9 serial adaptor together with a straight Ethernet cable and the DB-9 adaptor provided by Uplogix to connect to the console port.



The default settings for the console port are 9600, 8, N, 1.

Following initial setup, you may choose to disconnect the console cable and manage the Local Manager via Ethernet.

Removing an expansion card that will not be replaced

Caution: Always power off the Local Manager before installing or removing expansion cards.

To remove an expansion card permanently:

1. Power off the Local Manager.
2. Loosen the module retention screws and slide the card out of the Local Manager.
3. Position the blank faceplate over the opening and tighten the module retention screws to secure.
4. Power on the Local Manager.
5. The Local Manager generates an alarm indicating that the card is missing. To clear this alarm, along with all the database information about the expansion card itself, use the `config system clear slot` command after completing the Local Manager configuration.
6. To clear all data associated with the ports on the removed expansion card, use the `config system clear port` command. You can specify all ports using the `*` wildcard character—for example, **`config system clear port 2/*`** removes all port data associated with slot 2 ports.

Quick setup

You may configure the Local Manager as a standalone network management tool or configure it to be managed by the Uplogix Control Center.

The Uplogix 500 and 5000 Local Managers can be initially provisioned via their console connections. The Uplogix 5000 Local Manager can alternatively be provisioned via the front panel keypad.

Note: Substitute appropriate IP addresses and other values for your deployment for those shown in the examples.

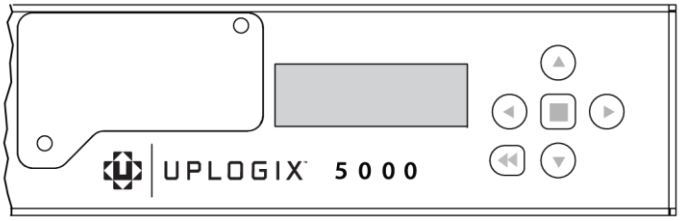
In this chapter:

- Initial configuration using the keypad
- Initial configuration via console connection
- Configuring the Local Manager for your LAN
- Configuring an optional Pulse server
- Configuring communication with the Uplogix Control Center (UCC)
- Remote access via the management IP connection
- Locking the keypad and changing the admin password
- Configuring managed device and power control ports

Initial configuration using the keypad

The Uplogix Local Manager is ready to provision when the front panel display begins to scroll information.

The keypad located on the front panel provides up, down, left, and right keys (labeled with arrows) as well as enter (i.e. the middle key) and back keys. The left and right arrows move the cursor left and right, respectively. The up and down arrows change numerical values.



When you use the keypad, no username/password is required.

For each setting, you can accept the default or existing setting by pressing the enter key.

1. Press the enter key on the keypad to access the menu. The > character appears to the left of the currently selected option. Press enter or the right arrow button to access the configuration screens.

   ```
   >Configure

   Restart
   ```

2. The Local Manager can use a DHCP server for network addressing. Brackets appear around the selected option. Use the left and right arrows to select your response and press enter to advance. If you are using DHCP, press the enter key and skip to Step 6. You can review the assigned IP address after configuration is complete by re-entering the configuration dialog.

   ```
   Use DHCP?

   [Yes] No
   ```

3. If you choose not to use DHCP, enter the IP address that the Local Manager should use. Use the left and right arrows to move between digits of the IP address, and the up and down arrows to change individual digits. The > prompt points to the digit to be changed.

   ```
   IP Address:

   >000.000.000.000
   ```

   When entering an IP address, built-in validation keeps the octet below 255 at all times. You may need to change the second digit before you can change the first digit.

   For example, to change the number 180 to 240, you must change the second digit from 8 to 4 before you can change the first digit from 1 to 2. The validation will not allow an address 280, so the first character will toggle between 1 and 0 until you change the second character to keep the octet at or below 255.

4. Configure the Local Manager's subnet mask in the same manner:

   ```
   Netmask:

   >255.255.255.000
   ```

5. Specify a default route for network connectivity.

   ```
   Default Route:

   >000.000.000.000
   ```

6. Whether you use DHCP or a static IP address, the Local Manager next prompts you to select speed and duplex options for the management Ethernet connection.

   ```
   Speed/Duplex

   <auto>
   ```

   Autonegotiation is the default setting. If you choose not to use autonegotiation, select speed and duplexing to match your network.

   ```
   Speed/Duplex

   <auto>
   ```

   Use the right arrow key to view other speed/duplex options. They appear as 1000full, 100full, 10full, 100half and 10half.

   This setting needs to match the speed and duplex setting on the switch port that is connected to your Local Manager.

7. If a Pulse server is to be used, enter the IP address here. Consult the *User Guide for Uplogix Local Manager* for more information about Pulse functionality.

   ```
   Pulse Server IP:
   127.000.000.001
   ```

8. Enter an IP address for the Uplogix Control Center only if this unit is to be managed by an Uplogix Control Center. Otherwise, do not enter an IP address at this prompt. Press enter to skip to the next configuration item.

   ```
   Server IP:
   >127.000.000.001
   ```

   If the Local Manager has already been associated with an Uplogix Control Center that uses a DNS name, this prompt is not displayed.

9. The Local Manager is now configured. Select Yes to save your changes.

   ```
   Confirm Changes?
   Yes [No]
   ```

If you have configured the Local Manager with a management IP address, you can now manage it remotely via an SSH session. Refer to Remote access via the management IP connection section of this guide.

Note: For security, you may disable the keypad after you finish the initial setup. Refer to Locking the keypad and changing the admin password section of this guide.

Initial configuration via console connection

To configure the Uplogix Local Manager via the console port, connect directly to the console port on the front of the device. This port is labeled CON. The configuration options available via the keypad are also available through the command line. These are described below.

Open a connection to the Local Manager using a terminal client on your computer. Supported terminal clients include:

- Windows HyperTerminal
- ZTerm (Macintosh OS X)
- Minicom (Unix/Linux)

The default console connection settings are 9600 baud, 8 data bits, 1 stop bit, no parity. For best results, set your terminal emulator to use ANSI encoding.

Note: The Uplogix Local Manager does not use flow control. If you use HyperTerminal, you must disable flow control when configuring the session.

After you connect to the Local Manager, you will be prompted for a username and password. The default username is **admin** and the default password is **password**. Usernames and passwords are case-sensitive.

Configuring the Local Manager for your LAN

The Uplogix Local Manager is initially configured to use DHCP. You can use the `show system ip` command to display current management Ethernet network settings. To configure the Local Manager's network addressing, use the `config system ip` command.

The Local Manager displays the current settings, and presents a prompt asking whether you want to make changes.

```
[admin@A501100303]# config system ip
--- Existing Values ---
Use DHCP: Yes
Management IP: 0.0.0.0
Host Name: A501100303
Subnet Mask: 255.255.255.0
Broadcast Address: 0.0.0.255
Default Route: 0.0.0.0
Speed/duplex: auto: 1000full
MAC Address: 00:0F:2C:00:CC:C6
Bonding Link: yes
Primary Ethernet Link: yes (bonded)
Auxiliary Ethernet Link: no (bonded)
Change these? (y/n) [n]: y
--- Enter New Values ---
Use DHCP: (y/n) [y]: n
Management IP: [0.0.0.0]: 198.51.100.4
Host Name: [A501100303]: UplogixLM
Subnet Mask: [255.255.255.0]:
Default Route: [0.0.0.0]: 198.51.100.254
speed/duplex: [auto:1000full]:
DNS Server IP: []:
Warning: Remote connections may be lost if you commit changes.
Do you want to commit these changes? (y/n): y
```

The changes take effect after you commit them.

If you have configured the Local Manager with a management IP address, you can now manage it remotely via an SSH session. Refer to Remote access via the management IP connection section of this guide.

Configuring an optional Pulse server

Specify a Pulse server using the `config system pulse` command.

```
[admin@UplogixLM]# config system pulse
--- Existing Values ---
Use Pulse: false
Pulse Server IP 1: 127.0.0.1
Pulse Server Port: 7
Enable Outband on Pulse Failure: no
Change these? (y/n) [n]: y
--- Enter New Values ---
Use Pulse (y/n) [n]: y
Pulse IP 1: [127.0.0.1]: 203.0.113.1
Pulse Port 1: [7]:
Pulse IP 2: [127.0.0.1]:
Pulse Port 2: [7]:
Pulse IP 3: [127.0.0.1]:
Pulse Port 3: [7]:

Enable Outband on Pulse Failure (y/n) [n]: n
Do you want to commit these changes? (y/n): y
```

The above example enables Pulse to one pulse server, but does not enable the automatic dial-out PPP function. The Uplogix Local Manager can use rules to generate alarms even when Pulse fails. For more information on Pulse and alarms, consult the *User Guide for Uplogix Local Manager*.

Configuring communication with the Uplogix Control Center (UCC)

Use the `config system management` command if you wish to manage the Uplogix Local Manager with a UCC. Uplogix recommends using the default values and setting the 'Hostname or IP:' field to contain the hostname or IP address of your UCC.

```
[admin@UplogixLM]# config system management
--- Existing Values ---
Use Management Server: false
Hostname or IP: 127.0.0.1
Port: 8443
Heartbeat interval (seconds): 30
Heartbeat band: all
Always use minimal heartbeat: false
Last successful heartbeat:  (not yet contacted)
Change these? (y/n) [n]: y
--- Enter New Values ---
Use Management Server (y/n) [n]: y
Hostname or IP [127.0.0.1]: 203.0.113.3
Port [8443]:
Heartbeat interval (seconds) [30]:
Heartbeat during [all]:
Do you want to commit these changes? (y/n): y
```

Remote access via the management IP connection

Uplogix Local Manager uses Secure Shell (SSH) V2 software to provide secure remote access. Your remote client application must also support SSH v2.

Supported clients include:

- Uplogix Control Center Applet
- PuTTY
- VanDyke® SecureCRT®
- SSHTerm for Windows
- OpenSSH

For example, in a UNIX command line, type:

```
ssh admin@192.0.2.101
```

Log in with the default username and password (**admin** and **password**). When you are logged in, you will see a prompt similar to the following:

```
[admin@UplogixLM]#
```

Note: The first time your SSH client connects to an SSH host following installation or upgrade, you may see an SSH key fingerprint message. This is normal. The client usually caches the key for subsequent use and warns if the host has changed, often indicating network eavesdropping. This warning may reappear if the Local Manager is reset to factory defaults.

Locking the keypad and changing the admin password

To ensure security, you may wish to lock the keypad and/or change the admin user's password when you log in for the first time.

To lock the keypad, use the `config system keypad disable` command. The shutdown, restart, and factory reset functions will still be available from the keypad but the configuration menu will not be available.

The `admin` user cannot be deleted and has access to all commands. To change the `admin` account's password, use the `config password` command.

```
[admin@UplogixLM]# config password
New Password: ********
Confirm Password: ********
Password changed.
```

Alternatively, you can remove the admin user's password with `config user admin, no password`, or you could disable the user with `config user admin, disabled`.

You have completed the basic setup.

Refer to the *User Guide for Uplogix Local Manager* for detailed information about configuring and managing the Local Manager.

Configuring managed device and power control ports

Managed Device Ports

The device ports for the Local Manager are initially configured as native. When a supported device is connected, the port must be initialized for the specific device in order to enable advanced management functionality. Run the command **config init** to select the device make and model, then enter the device's login credentials, baud rate, and IP address if available. The Local Manager will then attempt to login to the device and if successful will schedule the default jobs for that device.

```
[admin@UplogixLM (port1/1)]# config init
--- Enter New Values ---
description: HWlabSwitch
make [native]: cisco
model:
os: ios
os version:
management IP: 192.0.2.12
console username: uplogixAutomatedAccount
console password: ********
confirm password: ********
enable username: uplogixAutomatedAccount
enable password: ********
confirm password: ********
secondary console username:
secondary console password:
secondary enable username:
secondary enable password:
Serial Bit Rate [9600]:
Serial Data Bit [8]:
Serial Parity [none]:
Serial Stop Bit [1]:
Serial Flow Control [none]:
Do you want to commit these changes? (y/n): y
Testing login will take a few moments...
```

Once the initial configuration is complete, minor device changes may be recommended to facilitate the timely and efficient collection of data from the device, such as increased console port speed and optimized logging. For more information see the *Uplogix Local Manager User Guide* or the *Configuration Guide* for the device being configured.

Power Control Ports

Switched power controller peripherals are used to manage power to devices connected to the Local Manager. Like managed devices, they must be configured with the **config init** command. Enter the make, model, and login credentials for the power controller being used, and then enter the outlet mappings for the managed devices.

For full documentation of configuring managed devices and power controllers, see the *Configuring Managed Devices and Power Control* section of the *Uplogix Local Manager User Guide*, available on the Uplogix support website, support.uplogix.com.

Support and regulatory information

Getting technical support

The Uplogix technical support web site allows you to open and review support requests, browse the knowledge base and download software updates. You must have a user account to view this site.

Requesting an account

To create an account, send an email to support@uplogix.com with the subject line "create account". Include this information:

- organization name
- account user's email address
- user's general contact information

Requesting support

Uplogix provides 24x7x365 support. If you need to contact Uplogix customer support, please provide this information:

- Product model
- Serial number and software version (use the `show version` command from the command line or use the arrow keys on the front panel to scroll through the information on the display)

Phone: 512-857-7070

Fax: 512-857-7002

URL: www.uplogix.com/support

Providing comments about this guide

Did you find the information you needed?

Was it accurate?

Did it help you?

Please contact our publications staff at support@uplogix.com to notify us of any issues with this guide's accuracy, completeness, or clarity.

We want you to be successful using our products. If you find a problem with this material, we will do our best to fix it.

Regulatory notices

The following section provides regulatory agency approvals for safety, electromagnetic compliance (EMC) and functional immunity that pertains to the Uplogix Local Manager.

Safety notices

UL 1950 - CSA 950 (US/Canada)

EMC notices

Federal Communications Commission (FCC) Class A Sub Part B

United States Federal Communications Commission notices

The following information is for FCC compliance of Class A devices: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy; and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to correct the interference at their own expense.

Modifications to this product not authorized by Uplogix could void the FCC approval and negate your authority to operate the product.

Industry Canada (IC)

This Class [A] digital apparatus complies with Canadian ICES-003.

Cet appareil numerique de la Classe [A] est conforme à la norme NMB-003 du Canada.

RoHS compliance

The Uplogix Local Manager product is in full compliance with the Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

CE Mark R & TTE directive

This equipment has been marked with the CE mark. This mark indicates compliance with EEC Directives 89/336/EC (electromagnetic compatibility), 73/23/EC (low voltage), and 92/59/EC (general product safety).

A full copy of the Declaration of Conformity can be obtained from:

Uplogix, Inc.
7600-B North Capital of Texas Highway, Suite 220
Austin, Texas 78731
USA

Declaration of Conformity: This equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Déclaration de Conformité: Cet appareil est conforme aux conditions essentielles et à toute autre modalité pertinente de la Directive 1999/5/CE.

Declaración de Conformidad: Este equipo cumple los requisitos esenciales y otras cláusulas importantes de la directiva 1999/5/CE.

Konformitätserklärung: Dieses Gerät erfüllt die grundlegenden Anforderungen und sonstige maßgebliche Bestimmungen der Richtlinie 1999/5/EG.

Konformitätserklärung: Dette utstyret er i overensstemmelse med de grundlæggende krav og de relevante punkter i direktiv 1999/5/EF.

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