



# Max 3 Modem Module Installation Instructions

*For Use with Max 3 and MiniMax 3 Systems*

## Specifications/Requirements:

### Mechanical:

2.90" W x 3.45" L x 0.81" D

### Environmental:

Environment: Indoor Only

Temperature Tolerance: 32° F to 120° F (0° – 49°C)

### Electrical:

Operating Voltage: 12VDC (Power from Max 3 Door Control Module)

Current Draw: 75mA

### Software Compatibility:

Hub Manager Professional Version 7.4 (or higher)

### Communication Speed

Baud Rate: 19200kbps

## Description

The **IEI Max3 modem module** is used for dial up remote site management applications. The modem is designed for easy plug-on installation to Max 3 Door Control Modules for Max 3 and MiniMax 3 systems. The following sections discuss the system requirements, installation and wiring.

## Software Compatibility

The Max 3 Modem is compatible with Hub Manager Professional Version 7.4 (or higher). You can also download the latest version of software at [www.ieib.com](http://www.ieib.com) or update your existing software through iUpdate.

## Technical Support

**Service Company:** To contact IEI's Technical Support department, call 1- 800-343-9502, Monday through Friday. Questions can also be submitted through our website at [www.ieib.com](http://www.ieib.com).

**End User:** Please contact your service company.

## Packing List

- (1) Max 3 Modem Module
- (1) Installation Instructions
- (1) RS-485 Wire Harness (green, blue and gray)
- (1) Power Wire Harness (red and black)
- (1) Ground Wire (black)
- (3)  $\frac{3}{4}$ " Metal Standoffs for Mounting
- (1) Hub Manager Professional Software CD
- (1) 6-Foot Cord
- (1) External RJ-11 Jack

### 15.21 Information to User

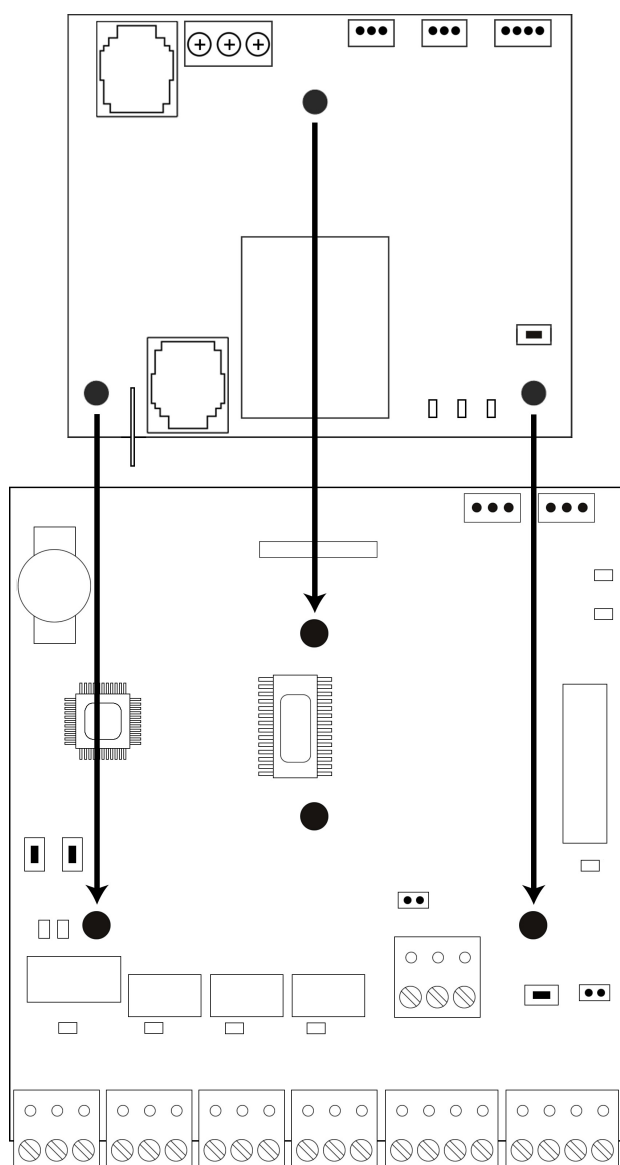
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## Mounting the Max 3 Modem Module

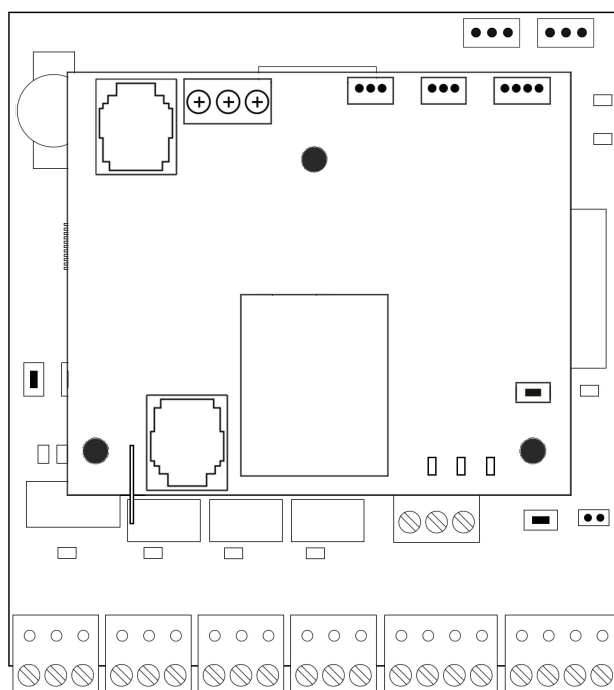
The Max 3 Modem is designed to mount on top of the first module in the system. Follow the instructions and the diagram below to mount and wire the Max 3 Modem.

1. Turn off power to the first Max 3 Module by placing SW1 on the backplane into the OFF position.
2. Remove the programming keypad (if installed) from the first Max 3 Module in the system.
3. Remove the three  $\frac{1}{2}$ " stand-offs used to secure the Max 3 Module, then thread the three  $\frac{3}{4}$ " stand-offs supplied with the Max 3 Modem onto the threaded posts supporting the Max 3 Module to increase the height off the module.
4. Place the Max 3 Modem onto the three stand-offs.
5. Secure the Max 3 Modem using the  $\frac{1}{2}$ " stand-offs removed in step 1.

**Caution: Do not turn power back on until after you have completed wiring the Max 3 Modem Module.**



**Note:** MiniMax 3 Systems previously used nylon stand-offs to mount the Max 3 Module. If your system does not have the metal stand-offs required for mounting the Max 3 Modem Module, please contact IEI technical support.

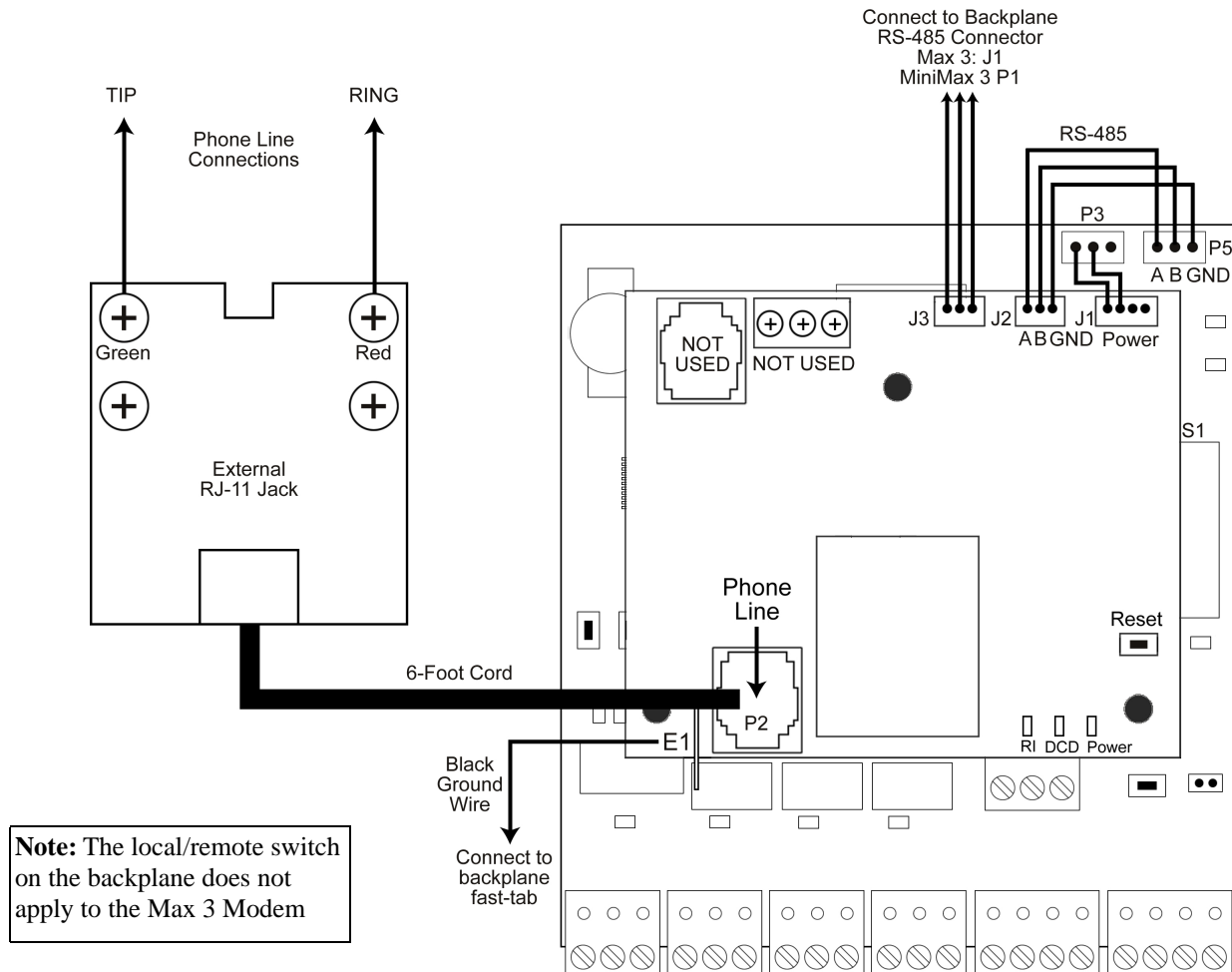


# Wiring the Max 3 Modem Module

Follow the instructions below for wiring a Max 3 Modem Module to a new Max 3 or MiniMax 3 System.

**Caution: Power must be off prior wiring the Max 3 Modem Module.**

1. Connect RS-485
  - Connect J2 on the Max 3 Modem to P5 on the Max 3 Module, using the three-position wire harness (green, blue, gray), that is provided with your Max 3 System.
  - Connect J3 on the Max 3 Modem to the backplane (J1 on a Max 3 OR P1 on a MiniMax 3), using the three-position wire harness (green, blue, gray), that is provided with your Max 3 Modem Module.
2. Connect Power
  - Connect J1 on the Max 3 Modem to P3 on the Max 3 Module using the red and black wire harness that is provided with your Max 3 Modem Module.
3. Connect Earth Ground
  - Plug the black ground wire onto the fast-tab E1 on the Modem, then connect it to the fast-tab on the backplane (TAB1 on MiniMax 3 OR FT1 on Max 3). **Note:** This is the same fast-tab used for your front-end shield.
4. Connect the Phone Line
  - Wire the TIP and RING lines from your phone line to the external RJ-11 Jack provided with the Max 3 Modem. TIP goes to the GREEN wire and RING goes to the RED wire. **Note:** If you already have a phone jack near your Max 3 System, this step may not be required.
  - Plug the 6-Foot Cord provided with the Max 3 Modem into the external RJ-11 jack (or existing phone jack), then into the RJ-11 jack on the Modem labeled PHONE LINE (P2).
5. Turn on power to the first Max 3 Module by placing SW1 on the backplane into the ON position.



# Converting a Serial Connected Max 3 System to a Modem Connection

Follow the instructions below to convert a serial connected Max 3 system to a modem connection. Refer to the diagram on the previous page.

**Caution: Power must be off prior wiring the Max 3 Modem Module.**

1. Connect RS-485
  - Disconnect your USB to Serial Converter OR RS-232 to RS-485 Converter from TS3 on the backplane.
  - Disconnect the three-position wire harness (green, blue, gray) from P5 on the Max 3 Module (leave the other end connected to the backplane).
  - Connect the three-position wire harness (green, blue, gray) from the backplane to J3 on the Max 3 Modem.
  - Connect J2 on the Max 3 Modem to P5 on the Max 3 Module using the three-position wire harness (green, blue, gray) that is provided with your Max 3 Modem Module.
2. Connect Power
  - Connect J1 on the Max 3 Modem to P3 on the Max 3 Module using the red and black wire harness that is provided with your Max 3 Modem Module..
3. Connect Earth Ground
  - Plug the black ground wire onto the fast-tab E1 on the Modem, then connect it to the fast-tab on the backplane (TAB1 on MiniMax 3 OR FT1 on Max 3). **Note:** This is the same fast-tab used for your front-end shield.
4. Connect the Phone Line
  - Wire the TIP and RING lines from your phone line to the external RJ-11 Jack provided with the Max 3 Modem. TIP goes to the GREEN wire and RING goes to the RED wire. **Note:** If you already have a phone jack near your Max 3 System, this step may not be required.
  - Plug the 6-Foot Cord provided with the Max 3 Modem into the external RJ-11 jack (or existing phone jack), then into the RJ-11 jack on the Modem labeled PHONE LINE (P2).
5. Turn on power to the first Max 3 Module by placing SW1 on the backplane into the ON position.

## Modem LED Indications

The chart below describes the three LED indicators on the Max 3 Modem Module.

LED			Description	
LED	Label	Color	Function	Details
LED 1	RI	Red	Ring Indicator	Flashes when ringing; Off normally
LED 2	DCD	Red	Data Carrier Detect	Turns on solid when connected; Off when disconnected
LED 3	POWER	Green	Modem Power	Turns on solid when power turned on; Off when not powered.