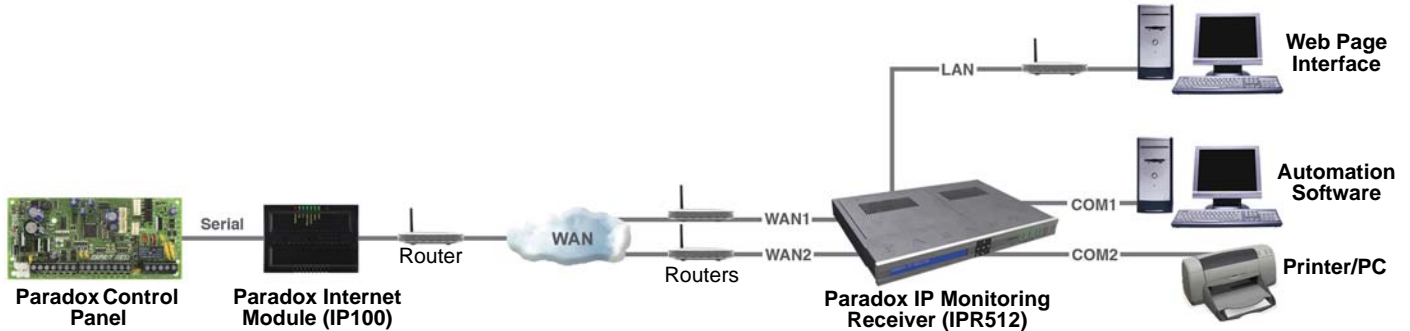


IPR512: IP Monitoring Receiver

Getting Started

The following instructions explain the basic connections and programming required to get your Paradox IP Monitoring Receiver up and running. It also provides instructions on how the installer must register the IP100 to the receiver. For more detailed information, please refer to the IPR512 Operating Manual.

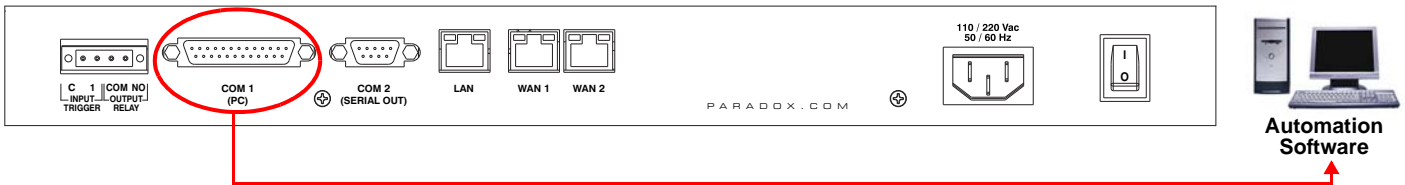
Figure 1: System Overview



Out of the Box (included):	Additional Items Required (not included)
<ul style="list-style-type: none"> • Paradox IP Monitoring Receiver (IPR512) • 1Gb SD memory card • 6-foot power cable • 10-foot DB25 to DB9 serial cable for COM1 • Gender changer • Rack-mount kit (brackets and screws) • Desktop installation kit (rubber feet) • Removable connector for Input/Output Relay 	<ul style="list-style-type: none"> • CAT5 network cable for LAN and WAN1 • Optional: DB9 or DB25 serial cable (RS-232) for COM2 • Router and computer on a network to access internal web page interface (LAN) • Router on a network with internet access (WAN1) to receiver system report codes

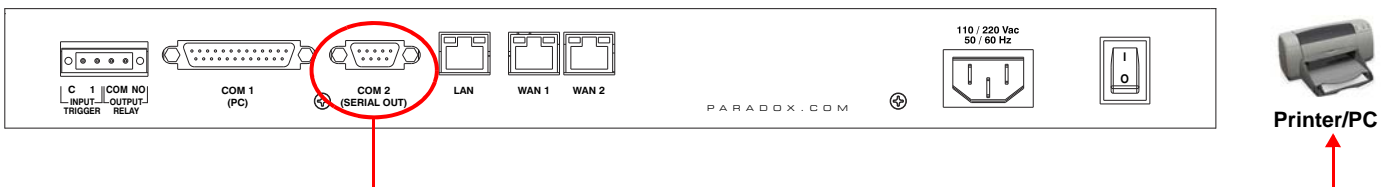
Step 1: Connect COM1 (Automation Software)

Connect the receiver to a PC running the Automation Software. Connect the provided 10-foot DB25 to DB9 cable between the receiver's COM1 connector and a COM port on the PC, or on the PC's serial hub.



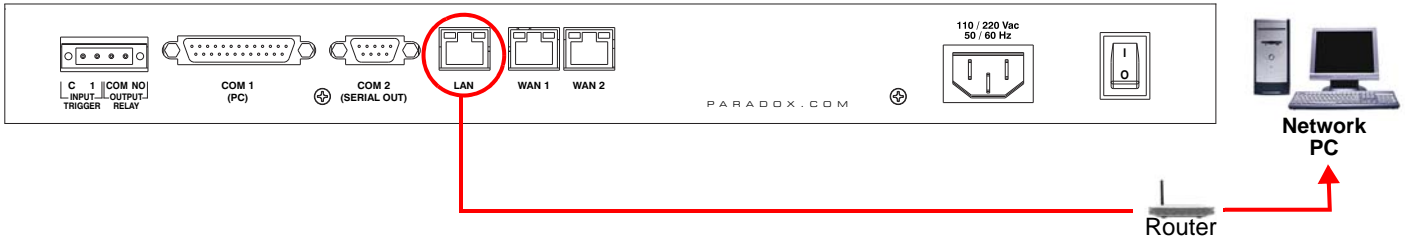
Step 2: Connect COM2 (Optional: Printer/PC)

This step is optional. Connect the receiver to a Printer or to a PC running a program such as HyperTerminal. The receiver sends reported events in plain text format through COM2 (RS-232), which can be printed or viewed. Connect a serial cable between the receiver's COM2 (DB9) connector and a COM port on the printer or PC (gender changer is included).



Step 3: Connect LAN (Web Page Interface)

Connect the receiver to a router on a network. A computer on the network will be used to access the receiver's internal web page interface in order to configure the receiver. Connect a CAT5 network cable between the receiver's LAN connector and the router of the network.



Step 4: Connect WAN1 (Internet Service Provider)

Connect the receiver to a router on a network with access to the internet. System events are sent through the internet to the WAN port of the receiver defined by the IP address and port set in the control panel. Connect a CAT5 network cable between the receiver's WAN1 connector and the router of a network with internet access. Connect WAN2 to another router and network to provide redundant reporting through a different Internet Service Provider (ISP). **Note: WAN2 is not available on this version.**



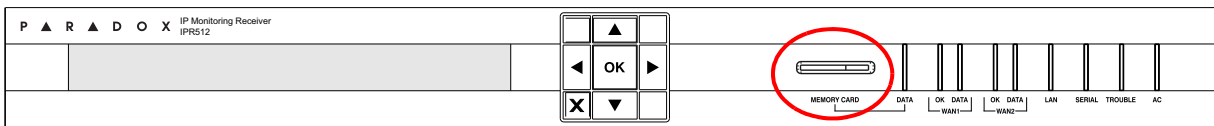
Step 5: Connect Power

Connect the AC power cable (included) between the plug at the back of the receiver and an Interruptible Power Supply, such as a UPS.



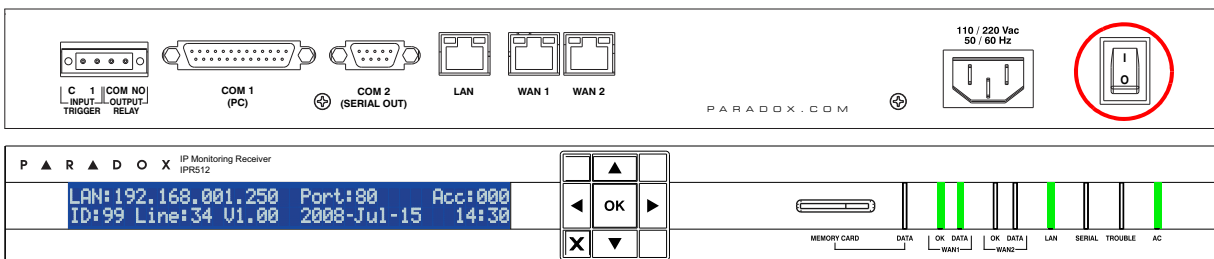
Step 6: Insert Memory Card (Data Backup)

Insert the 1Gb SD memory card (included) into the Memory Card slot. The IPR512 supports any external SD, SD/HC, or MMC memory card. The receiver backs up data (receiver configuration and account information) at programmable intervals (default: every 2 hours). Manual backups can be performed from the receiver LCD menu (see IPR512 Operating Manual for details).



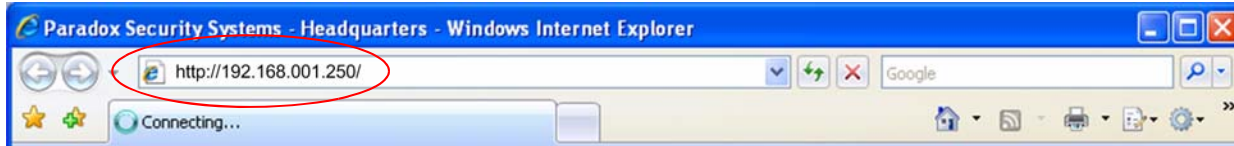
Step 7: Power Up

Turn on the receiver by pressing the on/off switch. The receiver will go through an initialization process. When complete, the LCD will display the information show below and the WAN1, LAN and AC lights will be ON as shown below. *Note: If the TROUBLE light is ON, please refer to "Trouble Display" on page 5. However, as long as the AC and LAN lights are on, you can proceed to step 8.*



Step 8: Access Receiver's Web Page Interface

Open a web browser from a computer on the network connected to the receiver's LAN port. Refer to "Step 3: Connect LAN (Web Page Interface)" on page 2. In the address line, enter the receiver's LAN IP Address (default: 192.168.001.250).



The Login window will appear. If you get an error page, you must change the receiver's **LAN** IP address and Subnet Mask. Speak to your network administrator to obtain an IP Address and Subnet Mask that will permit access to the receiver on your network. Perform the following to change the receiver's default IP Address and Subnet Mask:

1. Press **OK** on the receiver to access the Main Menu. If there are any troubles, pressing OK will enter the Trouble Menu. If this occurs, press X to access the Main Menu.
2. Use the Up/Down arrows and scroll to **LAN Settings** and press **OK**. The LCD will display the LAN IP Address and LAN Subnet Mask.
3. To change the IP Address, use the Up/Down arrows to change the value, use the Left/Right arrows to scroll and press **OK** when done.
4. To change the Subnet Mask, use the Up/Down arrows to change the value, use the Left/Right arrows to scroll and press **OK** when done.
5. The LCD will display **New LAN settings saved** for 4 seconds.

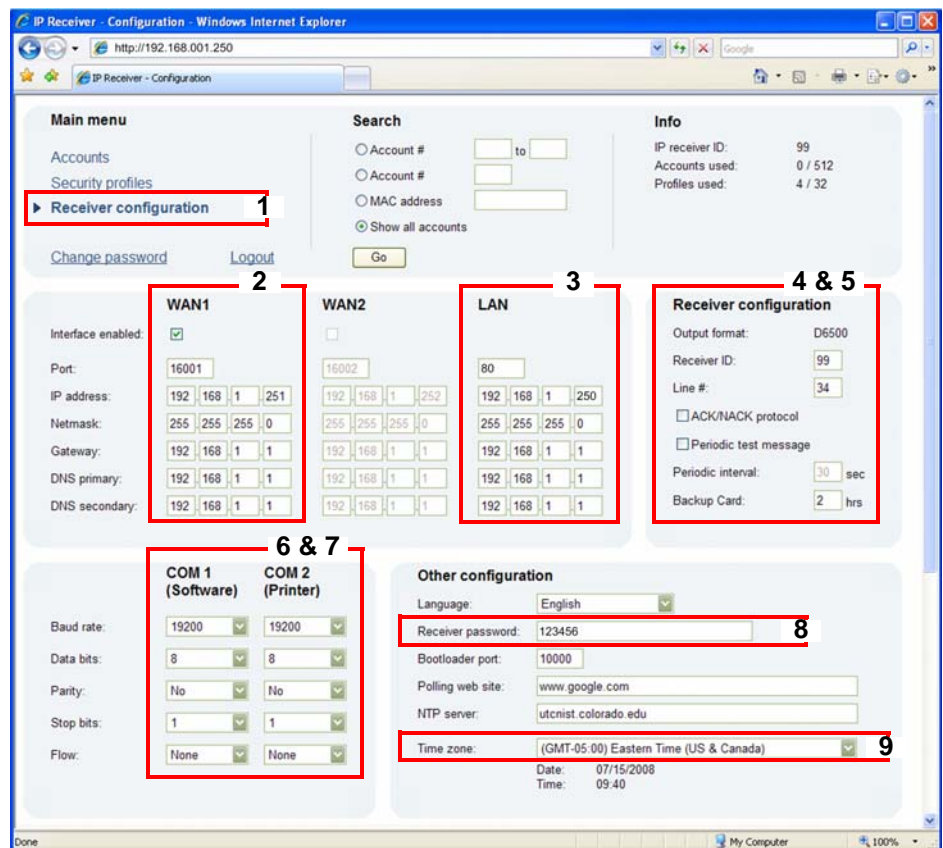
Step 9: Login

Enter the username and password and press the **Login** button. The username cannot be changed, but you can change your password by clicking on **Change Password**.

Step 10: Configure the Receiver

The following lists only the minimum programming required to get the receiver up and running. For more detailed information on the settings in the Web Page Interface, please refer to the IPR512 Operating Manual.

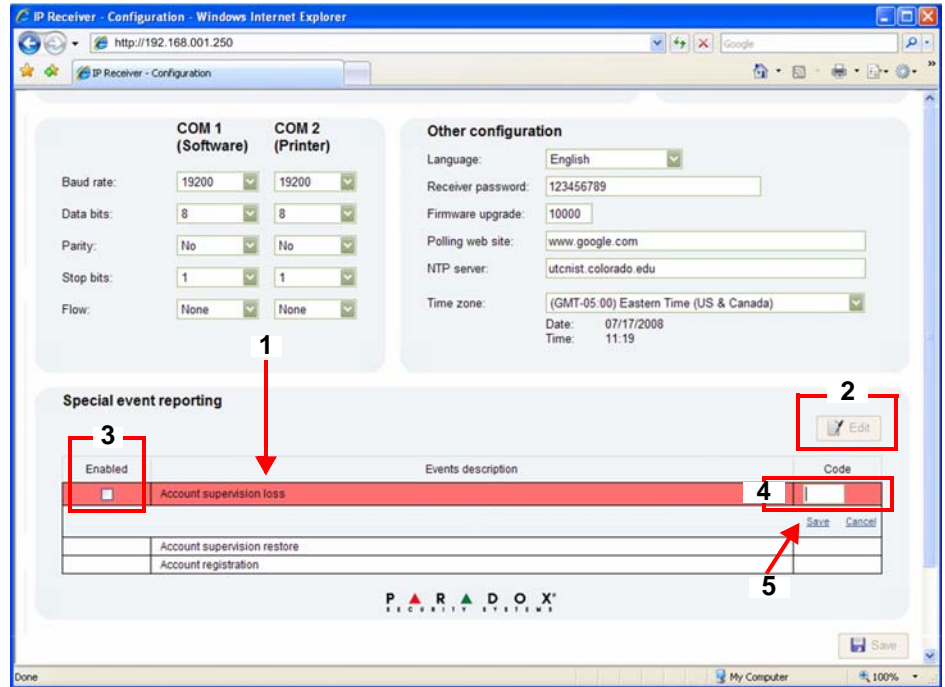
1. From the Main Menu, click **Receiver Configuration**.
2. Speak to your network administrator and enter the required **WAN1** settings.
3. Speak to your network administrator and enter the required **LAN** settings.
4. Set a unique **Receiver ID** and **Line #**. (ID = 00 to 99 and Line = 00 to 34)
5. Select the **ACK/NACK protocol** check box, if you want the receiver to supervise communication with the Automation Software.
6. In the Software column, adjust the COM1 port settings as required to communicate with the automation software.
7. Optional: In the Printer column, adjust the COM2 port settings as required to communicate with the printer/PC.
8. Type a password in the **Receiver password** text box. The password is a numerical value from 1 to 32 digits in length. This password is used by the installer when registering an IP100 module to the receiver.
9. Select your **Time Zone**.
10. Scroll to the bottom of the page and click the **Save** button.



Step 11: Set Supervision Loss Report Code

The IP100 will send a presence message (~100 bytes) at intervals defined by the Module Polling Time. If the receiver does not receive at least one presence message from the IP100 within the Receiver Supervision Time, the receiver can report a communication loss to the Automation Software. For more information, see “Step 12: Set Security Profile” on page 4

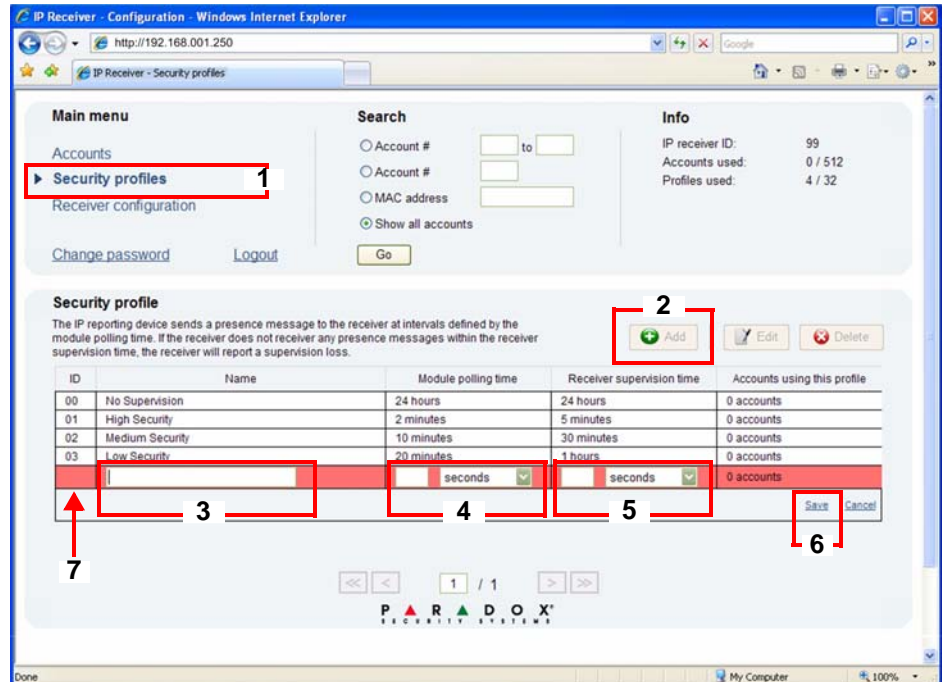
1. On the Receiver Configuration page, scroll to the bottom of the page. Highlight the *Account supervision loss* event.
2. Click the **Edit** button.
3. Select the **Enabled** check box to activate reporting of the selected event.
4. In the Code column, type a 3-digit report code. This report code will be reported in CID or SIA format to the Automation Software whenever the selected event occurs. The receiver uses the same report format used by the registered account.
5. Click the blue **Save** link.



Step 12: Set Security Profile

The receiver supervises the presence of up to 512 assigned IP100 modules. Up to 32 security profiles can be created per receiver with a programmable polling time (seconds, minutes, or hours). These profiles are then assigned to each of the IP100 modules during registration. The IP100 will send a presence message (~100 bytes) at intervals defined by the Module Polling Time. If the receiver does not receive at least one presence message from the IP100 within the Receiver Supervision Time, the receiver can report a communication loss to the Automation Software (see “Step 11: Set Supervision Loss Report Code” on page 4).

1. From the Main Menu, click **Security Profiles**.
2. Click the **Add** button.
3. Type a name for the new security profile.
4. In the Module Polling Time column type a 2-digit value and select a base time from the drop down list. Represents interval at which IP100 will send a presence message.
5. In the Receiver Supervision Time column type a 2-digit value and select base time from the drop down list. This value must be higher than the Module Polling Time. Represents the time the receiver will wait before reporting a communication loss.
6. Click **Save**.
7. The ID column represents the 2-digit value used by the installer when registering an IP100 module to the receiver.



Step 13: Installation and Set Up Complete

This completes the basic installation and set up required to get the receiver up and running. The next step is to register IP100 modules to the receiver. No monitoring station operator action is required to register an IP100 module. Registration is initiated by the installer upon installation of the IP100 module. However, the monitoring station must provide the installer with the following information that is entered by the installer.

- **Account #** for each partition of the site.
- **IP Address** and **Port** of the receiver(s) you wish that site to report to. See item #2 in “Step 10: Configure the Receiver” on page 3.
- **Receiver Password** (1 to 32 digits). See item #8 in “Step 10: Configure the Receiver” on page 3.
- **Security Profile** (2 digits). See “Step 12: Set Security Profile” on page 4.

Once the installer has entered this information, the installer then initiates communication with the receiver and the IP100 module will be automatically registered in the receiver. Refer to “Installer Instructions” on page 6.

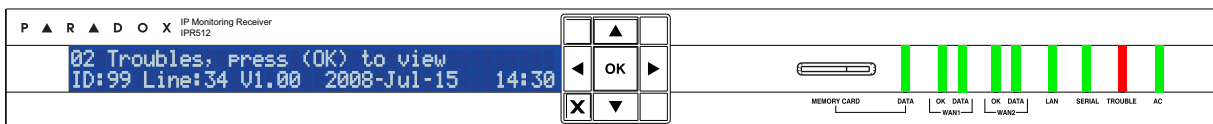
----- This completes installation and setup of the IPR512 -----

Trouble and LED Display

Trouble Display

If a trouble occurs on the receiver, the TROUBLE LED will turn on and the screen will display “XX Troubles, click [OK] to view”. Press **OK** to access the trouble menu, which will display one or more of the following troubles.

- Automation software communication failed
- LAN: Not connected to a network
- WAN1: Not connected to a network
- WAN1: Not connected to Internet
- WAN2: Not connected to a network
- Memory card not connected
- Memory card init failed



LED Display

The Status LEDs on the front of the receiver provide the following information

- **DATA (memory card):** On when accessing (reading/writing) the memory card (back up).
- **WAN1 OK:** On when network connection is detected on WAN1 port.
- **WAN1 DATA:** On when sending or receiving data through WAN1 port.
- **WAN2 OK:** On when network connection is detected on WAN2 port.
- **WAN2 DATA:** On when sending or receiving data through WAN2 port.
- **LAN:** On when network connection is detected on the LAN port.
- **SERIAL:** On when connected with the automation software on COM1 (ACK/NACK must be enabled, see item# 5 in “Step 10: Configure the Receiver” on page 3).
- **TROUBLE:** On when a trouble with the unit is detected. Troubles can be viewed through the LCD.
- **AC:** On when the IPR512 is powered.

Installer Instructions

Setup Control Panel and Register IP100 Module

The installer must program the following settings in the control panel (Steps 1 to 4 below) and then initiate the registration process from the control panel (Step 5 below).

STEP	MG/SP/E55/E65	EVO																																													
1. Ensure that the panel's report code format is set to either Ademco Contact ID (default) or SIA. The # represents the telephone number and the IP Receiver number	[810] __ / __ (IP#1 / IP#2) 4 = Contact ID 5 = SIA	[3070] __ / __ / __ / __ (IP#1 / IP#2 / IP#3 / IP#4) 5 = Contact ID 6 = SIA																																													
2. Enter the IP reporting account numbers (one for each partition). These account numbers are independent of the landline dialer account numbers, but you can program the same value.	[853] = Partition 1 [854] = Partition 2	[2976] = Partition 1 [2980] = Partition 5 [2977] = Partition 2 [2981] = Partition 6 [2978] = Partition 3 [2982] = Partition 7 [2979] = Partition 4 [2983] = Partition 8																																													
3. Ensure that IP reporting is enabled, and set the Landline Dialer Reporting and IP Line Monitoring options. * = default	[806]	[2975]																																													
	<table border="1"> <thead> <tr> <th>[5]</th> <th>[6]</th> <th>IP Line Monitoring Options</th> </tr> </thead> <tbody> <tr> <td>off</td> <td>off</td> <td>Disabled</td> </tr> <tr> <td>off*</td> <td>on*</td> <td>When disarmed: Trouble only When armed: Trouble only</td> </tr> <tr> <td>on</td> <td>off</td> <td>When disarmed: Trouble only When armed: Audible alarm</td> </tr> <tr> <td>on</td> <td>on</td> <td>Silent alarm becomes audible alarm</td> </tr> </tbody> </table> <p>[7] Landline Dialer Reporting OFF* = As backup to IP reporting ON = In addition to IP reporting</p> <p>[8] IP Reporting OFF = Disabled ON* = Enabled</p>	[5]	[6]	IP Line Monitoring Options	off	off	Disabled	off*	on*	When disarmed: Trouble only When armed: Trouble only	on	off	When disarmed: Trouble only When armed: Audible alarm	on	on	Silent alarm becomes audible alarm																															
[5]	[6]	IP Line Monitoring Options																																													
off	off	Disabled																																													
off*	on*	When disarmed: Trouble only When armed: Trouble only																																													
on	off	When disarmed: Trouble only When armed: Audible alarm																																													
on	on	Silent alarm becomes audible alarm																																													
4. Enter the IP address(es), IP port(s), receiver password(s), and security profile(s) of the monitoring station's Paradox IPR512 IP Monitoring Receiver(s). This information is provided by the monitoring station.	<table border="1"> <thead> <tr> <th>IP Receiver #</th> <th>#1</th> <th>#2</th> <th>Backup</th> </tr> </thead> <tbody> <tr> <td>IP Address</td> <td>[885]</td> <td>[890]</td> <td>[895]</td> </tr> <tr> <td>IP Port</td> <td>[886]</td> <td>[891]</td> <td>[896]</td> </tr> <tr> <td>IP Password</td> <td>[887]</td> <td>[892]</td> <td>[897]</td> </tr> <tr> <td>IP Profile</td> <td>[888]</td> <td>[893]</td> <td>[898]</td> </tr> </tbody> </table>	IP Receiver #	#1	#2	Backup	IP Address	[885]	[890]	[895]	IP Port	[886]	[891]	[896]	IP Password	[887]	[892]	[897]	IP Profile	[888]	[893]	[898]	<table border="1"> <thead> <tr> <th>IP Receiver #</th> <th>#1</th> <th>#2</th> <th>#3</th> <th>#4</th> </tr> </thead> <tbody> <tr> <td>IP Address</td> <td>[2984]</td> <td>[2986]</td> <td>[2988]</td> <td>[2990]</td> </tr> <tr> <td>IP Port</td> <td>*</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>IP Password</td> <td>*</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>IP Profile</td> <td>*</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Port, Password, and Profile are set in the same section as the Address.</p>	IP Receiver #	#1	#2	#3	#4	IP Address	[2984]	[2986]	[2988]	[2990]	IP Port	*	*	*	*	IP Password	*	*	*	*	IP Profile	*	*	*	*
IP Receiver #	#1	#2	Backup																																												
IP Address	[885]	[890]	[895]																																												
IP Port	[886]	[891]	[896]																																												
IP Password	[887]	[892]	[897]																																												
IP Profile	[888]	[893]	[898]																																												
IP Receiver #	#1	#2	#3	#4																																											
IP Address	[2984]	[2986]	[2988]	[2990]																																											
IP Port	*	*	*	*																																											
IP Password	*	*	*	*																																											
IP Profile	*	*	*	*																																											
5. Register the IP100 module with the receiver by entering the appropriate section and pressing [ARM] . The registration status is displayed as well as any registration errors.	<table border="1"> <thead> <tr> <th>IP Receiver #</th> <th>#1</th> <th>#2</th> <th>Backup</th> </tr> </thead> <tbody> <tr> <td>Register/Status</td> <td>[889]</td> <td>[894]</td> <td>[899]</td> </tr> </tbody> </table>	IP Receiver #	#1	#2	Backup	Register/Status	[889]	[894]	[899]	<table border="1"> <thead> <tr> <th>IP Receiver #</th> <th>#1</th> <th>#2</th> <th>#3</th> <th>#4</th> </tr> </thead> <tbody> <tr> <td>IP Address</td> <td>[2985]</td> <td>[2987]</td> <td>[2989]</td> <td>[2991]</td> </tr> </tbody> </table>	IP Receiver #	#1	#2	#3	#4	IP Address	[2985]	[2987]	[2989]	[2991]																											
IP Receiver #	#1	#2	Backup																																												
Register/Status	[889]	[894]	[899]																																												
IP Receiver #	#1	#2	#3	#4																																											
IP Address	[2985]	[2987]	[2989]	[2991]																																											



PARADOX.COM
IPR512-EQ00 07/2008

© 2008 Paradox Security Systems Ltd. All rights reserved. Specifications may change without prior notice. One or more of the following US patents may apply: 7046142, 6215399, 6111256, 6104319, 5920259, 5886632, 5721542, 5287111, 5119069, 5077549 and RE39406 and other pending patents may apply. Canadian and international patents may also apply. For the latest information on products approvals, such as UL and CE, please visit www.paradox.com. For complete warranty information on this product please refer to the Limited Warranty Statement found on the website www.paradox.com/terms. Your use of the Paradox product signifies your acceptance of all warranty terms and conditions.