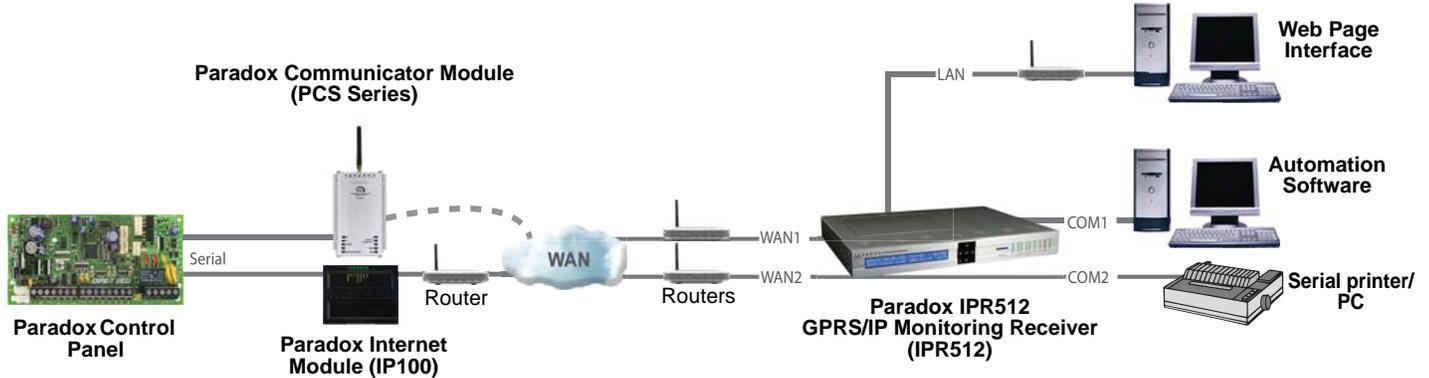


IPR512: GPRS/IP Monitoring Receiver V2.0

Quick Start

The following instructions explain the basic connections and programming required to get your Paradox IPR512 GPRS/IP Monitoring Receiver up and running. They also guide the installer on how to register the Paradox reporting module (IP100 Internet Module or PCS Module) to the receiver. For more detailed information, please refer to the IPR512 GPRS/IP Monitoring Receiver Operations Manual.

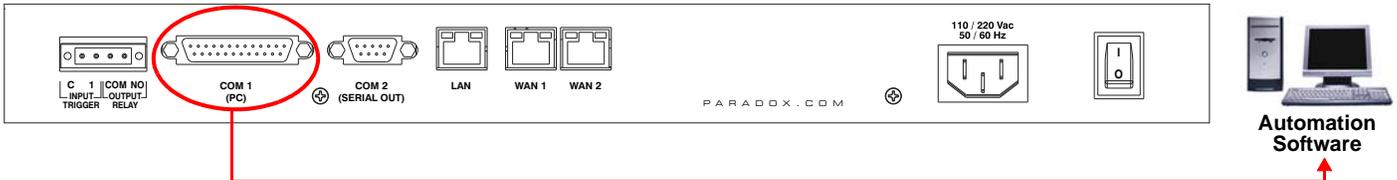
Figure 1: System Overview



Out of the Box (included):	Additional Items Required (not included)
<ul style="list-style-type: none"> Paradox IPR512 GPRS/IP Monitoring Receiver 2GB memory card 1.8m (6ft) power cable 3m (10ft) DB25 to DB9 serial cable for COM1 DB9 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/WAN2 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 receive control panel report codes

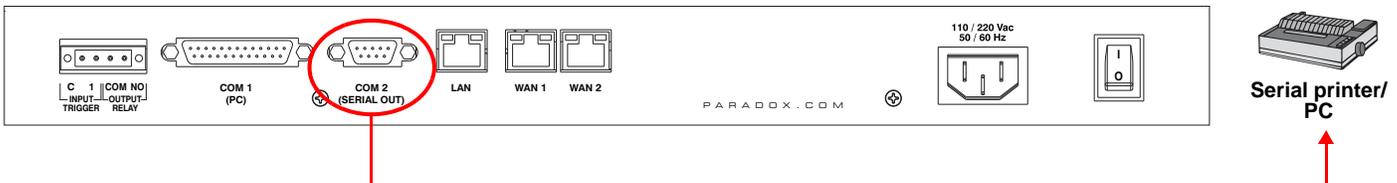
Step 1: Connect COM1 (Automation Software)

Connect the receiver to a PC running the automation software. Connect the provided 3m (10ft) DB25 to DB9 cable between the receiver's COM1 connector and a COM port on the PC, or on the PC's serial hub.



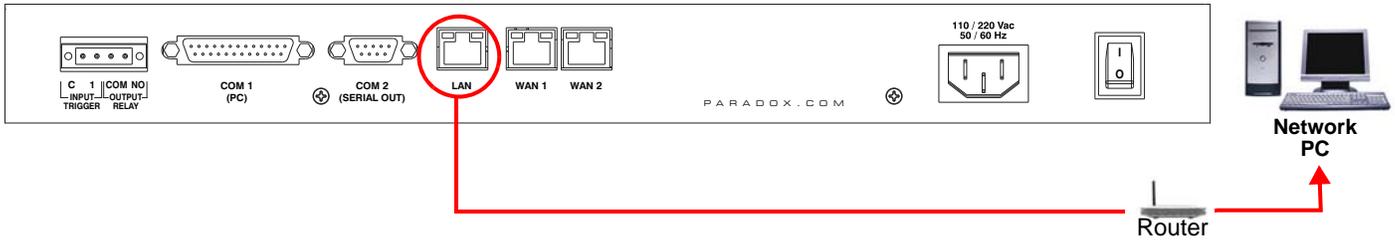
Step 2: Connect COM2 (Optional: Serial printer/PC)

This step is optional. Connect the receiver to a serial printer or to a PC running RS232 serial communication software. 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 serial printer or PC (gender changer is included).



Step 3: Connect LAN (Web Page Interface)

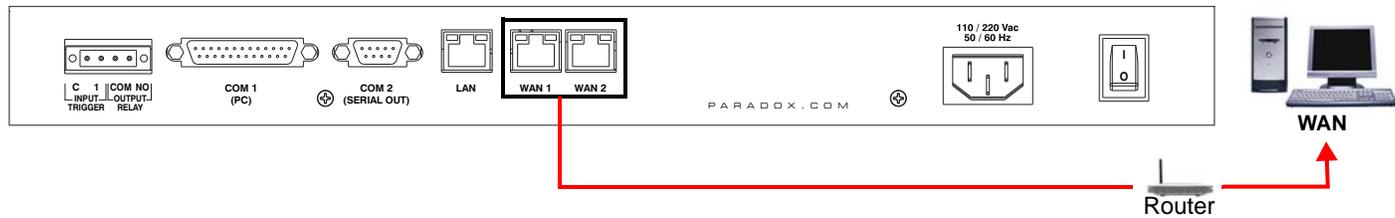
Connect the receiver to a router on a network. A computer on the network will be used to access the receiver's internal web page interface in order to configure the receiver. Connect a CAT5 network cable between the receiver's LAN connector and the router of the network.



Step 4: Connect WAN Port(s) (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: The router must be installed in the same room as the IPR512 GPRS/IP Monitoring Receiver.



Step 5: Connect Power

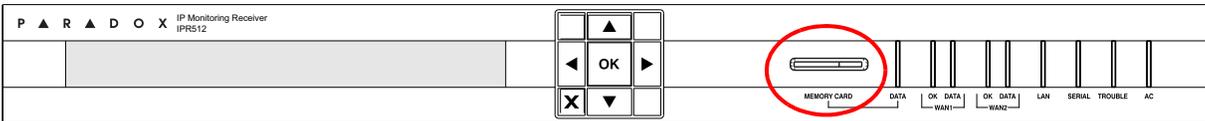
Connect the AC power cable (included) between the plug at the back of the receiver and an Uninterruptible Power Supply (UPS).

Note: To comply with applicable UL and CSA requirements, a Belkin Surge Protector (part number F9H120-CW) must be used between the IPR512's AC power cable and the electrical outlet or UPS source.



Step 6: Insert Memory Card (Data Backup)

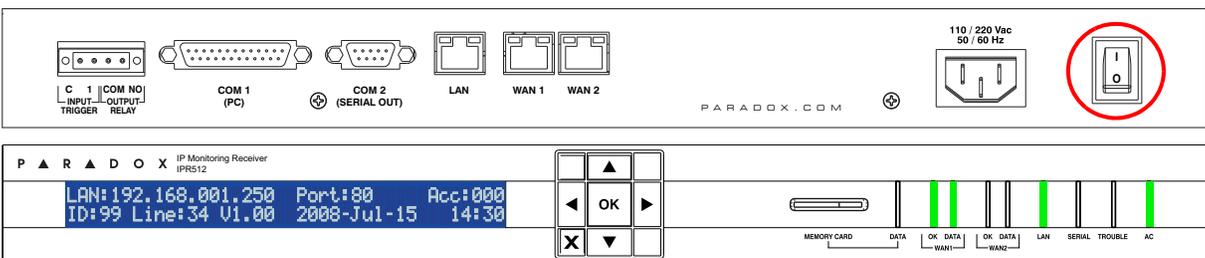
Insert memory card (included) into the Memory Card slot. The IPR512 supports any external SD, SD/HC, or MMC memory card. The receiver backs up data automatically (receiver configuration and account information) 10 minutes after a change has been made in the database. Manual backups can be performed from the receiver LCD menu, refer to the IPR512 GPRS/IP Monitoring Receiver Operations 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 system information and the WAN, LAN and AC lights will be ON as shown below.

Note: If the TROUBLE light is ON, please refer to Trouble and LED Display on page 7. 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).

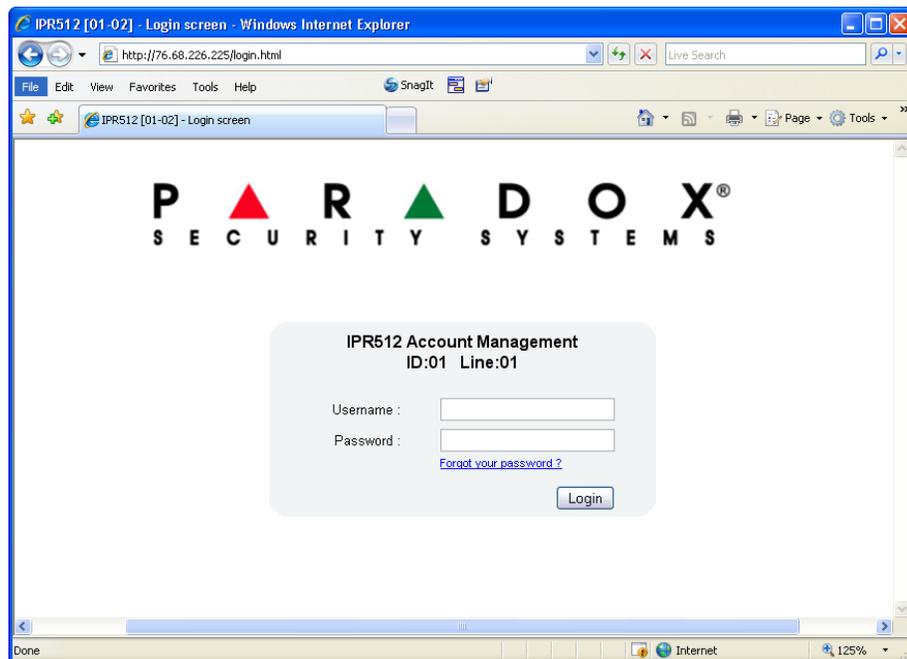


The Login window will appear. If you get an error page, you must change the receiver's **LAN** IP address and Subnet Mask. Speak to your network administrator to obtain an IP Address and Subnet Mask that will permit access to the receiver on your network. Perform the following to change the receiver's 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**.
- 3) Enter your password (default = admin). The LCD will display the **LAN IP Address** and **LAN Subnet Mask**.
- 4) 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.
- 5) 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.

Step 9: Login

Enter the username (default: **admin**) and password (default: **admin**) and press the **Login** button. The username cannot be changed, but you can change your password by clicking on **Change Password** option from the main menu.



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 settings in the Web Page Interface, please refer to the IPR512 GPRS/IP Monitoring Receiver Operation Manual.

- 1) From the Main Menu, click **Receiver Configuration**.
- 2) Enter the required **WAN** settings (speak to your network administrator).
- 3) Enter the required **LAN** settings (speak to your network administrator).
- 4) According to the automation software set the **Receiver ID** and **Line #**.
 - Radionics*: ID = 01 to 99 and Line = 01 to 34
 - Surgard*: ID = 01 to 99 and Line = 01 to 14
 - Ademco*: ID = 01 to 35 and Line = 01 to 35
- 5) Select the **ACK/NACK** check box, if you want the receiver to supervise communication with the Automation Software.
- 6) In the PC column, adjust the COM1 port settings as required to communicate with the automation software.
- 7) Optional: In the Serial 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 a paradox reporting module to the receiver.
- 9) Select your **Time Zone**.
- 10) Scroll to the bottom of the page and click the **Save** button.

*ADEMCO 685, SURGARD MLR2-DG, and RADIONICS 6500 are trademarks of their respective companies.

The screenshot shows the IPR512 Configuration web interface in Microsoft Internet Explorer. The browser address bar shows 'http://10.10.10.13/configrcv.html'. The interface includes a main menu on the left with 'Receiver configuration' highlighted (1). A search section is in the top middle. Receiver info is in the top right. The main configuration area is divided into sections: WAN1, WAN2, LAN, and Output protocol (4 & 5). WAN1 and WAN2 sections show interface enabled checkboxes and IP address, netmask, gateway, and DNS settings. The LAN section shows IP address, netmask, gateway, and DNS settings. The Output protocol section shows output type (Surgard MLR2-DG), header, trailer, receiver ID, line number, and ACK/NACK checkboxes. Below these are COM 1 and COM 2 (SERIAL OUT) settings (6 & 7), including baud rate, data bits, parity, stop bits, and flow. The Other configuration section (8) includes a receiver password field, upgrade port, polling web site, interval, and attempts. The Date and Time section (9) includes NTP server, time zone, and daylight savings time settings. At the bottom, there is a 'Save all changes' button (10) and a 'Save' button. The footer of the interface shows 'Done' and 'Internet' status.

Step 11: Event Configuration

The Paradox reporting module 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 module within the Receiver Supervision Time, the receiver can report a communication loss to the Automation Software. For more information, refer to Step 12: Set Security Profile on page 6. For more information on Receiver Events, refer to the IPR512 GPRS/IP Monitoring Receiver Operations Manual.

- 1) From the Main Menu, click **Event Configuration**.
- 2) Highlight the *Account* event.
- 3) Click the **Edit** button.
- 4) Select the **Reported** check box to activate reporting of the selected event.
- 5) Enter a report code (3 digits for CID format, 2 alphanumeric characters for SIA format). This report code will be reported in CID or SIA format to the Automation Software whenever the selected event occurs. For account events, the receiver uses the same report format used by the registered account. Receiver events are programmable.
- 6) Click the blue **Save** link.

The screenshot displays the IPR512 [09-09] - Events web interface. The browser title is "IPR512 [09-09] - Events - Microsoft Internet Explorer provided by Paradox Security Systems Ltd." and the address bar shows "http://10.10.10.13/event.html".

Main menu: Accounts, Security profiles, Receiver configuration, **Event configuration** (1), Receiver status, View/Restore deleted accounts, Change password, Logout.

Search: Account # from [] to [], Account # [], Module ID [], Show all accounts (checked), Go.

Receiver info: ID - Line : 09-09, Date: 22-Sep-2009, Time: 09:52, Accounts used: 507 of 512, Profiles used: 5 of 32, Deleted accounts: 5 of 5.

Account events: (2)

Events description	Reported	CID	SIA
Account supervision loss	<input checked="" type="checkbox"/>	700	zz
Account supervision restore	<input type="checkbox"/>		
Account registration			
Account deleted			

Buttons: Edit (3), Save (6), Cancel.

Receiver events: Receiver settings, Account #: 9999, Reporting format: CID (selected), SIA, Save, Edit.

Event description	Reported	Report CID
Account database reached 75%		
Accounts database reach 100%		
Account cannot register, database is full		
Automation software communication failure		
Automation software communication restore		

Step 12: Set Security Profile

The receiver supervises the presence of up to 512 assigned Paradox reporting 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 module during registration. The module 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 module within the Receiver Supervision Time, the receiver can report a communication loss to the Automation Software, refer to Step 11: Event Configuration on page 5.

- 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 the Paradox reporting module 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 a Paradox reporting module to the receiver. This number is automatically generated by the system.

The screenshot shows the 'Security profiles' web interface. The browser title is 'IPR512 [09-09] - Security profiles - Microsoft Internet Explorer provided by Paradox Security Systems Ltd.' The URL is 'http://10.10.10.13/profiles.html'. The interface includes a 'Main menu' with 'Security profiles' highlighted (1), a 'Search' section, and 'Receiver info' on the right. The 'Security profiles' section has an 'Add' button (2). Below is a table with columns: ID, Name, Module polling time, Receiver supervision time, and Accounts using this profile. A new profile row is highlighted in red, with callouts: 3 for the Name input field, 4 for the Module polling time input and dropdown, 5 for the Receiver supervision time input and dropdown, and 6 for the Save button. A red arrow points to the ID column (7).

ID	Name	Module polling time	Receiver supervision time	Accounts using this profile
00	No Supervision	6 hours	Not supervised	0 accounts
01	Low Security	10 minutes	1 hours	506 accounts
02	Medium Security	10 minutes	40 minutes	0 accounts
03	High Security	2 minutes	10 minutes	0 accounts
04	Maximum Security	25 seconds	90 seconds	1 accounts
--	<input type="text"/>	<input type="text"/> seconds	<input type="text"/> seconds	0 accounts

NOTE: For the Receiver Supervision Time (item #5), Paradox recommends a minimum value of 1 minute. Also, the Module Polling Time (item #4) must be at least than half the Receiver Supervision Time (e.g., RST: 1 minute - MPT: 30 sec.)

Step 13: What's Next

This completes the basic installation and set up required to get the receiver up and running. For more detailed instructions, refer to the IPR512 GPRS/IP Monitoring Receiver Operations Manual.

The next step is to register Paradox reporting modules to the receiver. No monitoring station operator action is required to register a module. Registration is initiated by the installer upon installation of the module. However, the monitoring station must provide the installer with the following information that is entered by the installer.

- **IP Account #** for each partition of the site.
- **IP Address** and **Port** of the receiver(s) you wish that site to report to. Refer to item #2 in Step 10: Configure the Receiver on page 4.
- **Receiver Password** (1 to 32 digits). Refer to item #8 in Step 10: Configure the Receiver on page 4.
- **Security Profile** (2 digits). Refer to Step 12: Set Security Profile on page 6.

Once the installer has entered this information, the installer then initiates communication with the receiver and the Paradox reporting module will be automatically registered in the receiver, refer to Installer Instructions on page 8 for more information.

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

Trouble and LED Display

Trouble Display

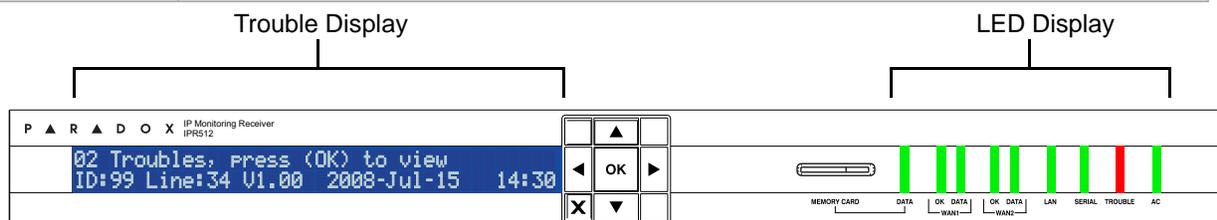
If a trouble occurs on the receiver, the TROUBLE LED will turn on and the screen will display "XX Troubles, click [OK] to view". Press **OK** to access the trouble menu, which will display one or more of the following troubles.

- LAN network connection failure
- WAN1 network connection failure
- WAN1 Internet connection failure
- WAN2 network connection failure
- WAN2 Internet connection failure
- Memory card not detected
- Memory card init failed
- Time server unreachable

LED Display

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

LED On	Status
DATA (memory card)	Accessing (reading/writing) the memory card (back up).
WAN1 OK	Network connection is detected on WAN1 port.
WAN1 DATA	Sending or receiving data through WAN1 port.
WAN2 OK	Network connection is detected on WAN2 port.
WAN2 DATA	Sending or receiving data through WAN2 port.
LAN	Network connection is detected on the LAN port.
SERIAL	Connected with the automation software on COM1 (ACK/NACK must be enabled, refer to item# 5 in Step 10: Configure the Receiver on page 4.
TROUBLE	Trouble with the unit is detected. Troubles can be viewed through the LCD.
AC	The IPR512 is powered.



Installer Instructions

Setup Control Panel and Register Paradox Reporting Module

The installer must program the following settings in the control panel (steps 1 to 6 below) and then register the communication module with the IPR512 (step 7 below).

Note: Default settings appear in bold.

Step 1: Ensure that the panel's report code format is set to either Ademco Contact ID (default) or SIA.

MG/SP/E	EVO
[810] ___ / ___ (IP#1 / IP#2) 4 = Contact ID 5 = SIA	[3070] ___ / ___ / ___ / ___ (IP#1 / IP#2 / IP#3 / IP#4) 5 = Contact ID 6 = SIA

Step 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.

MG/SP/E	EVO
[918] = Partition 1 [919] = 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

Step 3: Set the IP Line Monitoring options.

MG/SP/E	EVO	MG/SP/E Details	EVO Details
[806]	[2975]	[5] Off + [6] Off = Disabled [5] Off + [6] On = Trouble only [5] On + [6] Off = When disarmed: Trouble only When armed: Audible alarm [5] On + [6] On = Silent alarm becomes an audible alarm	[5] Off + [6] Off = Disabled [5] Off + [6] On = When disarmed: Trouble only When armed: Audible alarm [5] On + [6] Off = Trouble only [5] On + [6] On = Silent alarm becomes an audible alarm

Step 4: Set the Landline Dialer Reporting option.

MG/SP/E	EVO	MG/SP/E Details	EVO Details
[806] option [7]	[2975] option [7]	OFF = As backup to IP/GPRS reporting ON = In addition to IP/GPRS reporting	OFF = As backup to IP/GPRS reporting ON = In addition to IP/GPRS reporting

Step 5: Enable IP Reporting.

MG/SP/E	EVO	MG/SP/E Details	EVO Details
[806] option [8]	[2975] option [8]	OFF = Disabled ON = Enabled	OFF = Disabled ON = Enabled

Step 6: 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.

Receiver Settings	MG/SP/E			EVO			
Receiver #:	Receiver 1:	Receiver 2:	Backup:	Receiver 1:	Receiver 2:	Receiver 3:	Receiver 4:
IP Address WAN1	[929]	[936]	[943]	[2984]	[2986]	[2988]	[2990]
IP Port WAN1	[930]	[937]	[944]	*	*	*	*
IP Address WAN1	[931]	[938]	[945]	*	*	*	*
IP Port WAN1	[932]	[939]	[946]	*	*	*	*
IP Password	[933]	[940]	[947]	*	*	*	*
IP Profile	[934]	[941]	[948]	*	*	*	*
* Port, Password, and Profile are set in the same section as the Address.							

Step 7: Register the Paradox reporting module with the receiver by entering the appropriate section and pressing **[ARM]**. The registration status is displayed as well as any registration errors.

Receiver Settings	MG/SP/E			EVO			
Receiver #:	Receiver 1:	Receiver 2:	Backup:	Receiver 1:	Receiver 2:	Receiver 3:	Receiver 4:
Register/Status	[935]	[942]	[949]	[2985]	[2987]	[2989]	[2991]