IP Receiver

For PIMA Wireless Alarm Systems

Installation & User Guide

Table of Contents

1 Introduction 3
1.1 Browser viewer 3
1.2 Platform 3
1.3 Features 3
1.4 Requirements 4
1.4.1 Internet connection 4
1.4.2 Hardware 4

2 Installation 5

3 The Dashboard 5
3.1 General 6
3.2 E-mail server settings 7
3.3 Remote connection 7
3.4 Web monitor 8
3.5 Panels supervision 8
3.6 Output protocol 9

4 E-mail Forwarding 10

5 The event viewer 11

Appendixes

Appendix A Using the IP Receiver to Connect the Programming Tool to the Alarm System 12
A.1 Programming Tool settings 12
A.2 IP Receiver settings 12
A.3 Alarm system settings 12
A.4 How to initiate a connection? 13

Appendix B Limited Warranty 15

Appendix C Declaration of Conformity 16

Appendix D End-User License Agreement 18

1 Introduction

The IP Receiver by PIMA Electronic Systems is an advanced solution for the reliable delivery of alarm events and visual images, directly from the AlarmView & Guardian Wireless Alarm systems, and the AVR visual add-on, to the CMS's (Central Monitoring Station) management application.

The receiver is a powerful client-server application, operating on GPRS/IP transmission. Alarm events are reported within 3 sec[1], and visual-verification color images within 60 seconds[2].

The IP Receiver can also be used to allow the Programming Tool to connect to the alarm systems, by sending the tool's IP address and port to the alarm system[3].

PIMA's solution integrates between the IP Receiver and the CMS server, for the effective verification of false alarms. It supports the majority of monitoring automation software protocols on the market and by that it is an ultimate answer for the CMS.

1.1 Browser viewer

The IP Receiver includes the option to view the events, including the captured images of visual events, in a web browser. This option is mostly useful for management software that does not support the display of visual events. The AlarmView solution manages and supports the entire event sequence, from the alarm's initial occurrence, to its immediate alert, with real time verification on the operator's monitor.

1.2 Platform

The IP Receiver application works as a Windows service, with built-in supervision mechanism, event-buffer backups and convenient admin dashboard and viewer. Designed not to require special user intervention, the receiver's application running on Services mode, is launched automatically with configurable auto-recovery mechanism and a "Keepalive", periodic test signal feature.

The receiver's client-server solution supports remote dashboard and event-viewer web application, enabling the admin to remotely monitor the server, configure setups, and view all incoming alerts and history buffer, which stores the last 500 events.

On a designated PC the IP Receiver can manage up to 2,000 visual-event sessions simultaneously, and accordingly, many thousands of accounts.

1.3 Features

- TCP/IP event transmission
- Alarm events typically received within 1 to 3 sec.
- Visual events typically received within 3 to 60
- Supported account numbers: 00000000 - FFFFFFFF
- Periodic test report ("Keepalive") on selectable intervals
- Low Bandwidth
- Encrypted transmission

1 The number of simultaneous sessions is scalable and depends on the server's hardware.

2 The time required for event and video reporting is dependent on the cellular operator.

3 Available in system ver. 2.09 and higher

- Two way dynamic authentication
- Event buffer of the last 500 events
- Application type: Windows service
- Client-server web application tools:
  - Admin dashboard monitor and setup configuration
  - Event viewer application
- LAN/RS-232 outputs
- Output Protocols for integration with automation software server:
  - PIMA generic interface protocol for Visual and CID events
  - ContactID output - Ademco 685/Sur-gard compatible
  - Visual outputs to automation software: Bold-Manitu, IBS
  - Tailor-made/customized integrations are available upon request.

1.4 Requirements

1.4.1 Internet connection

- Minimum bandwidth: 1.5Mb download, 0.25Mb upload (for 1000 accounts)
- Fixed IP address[4]
- Unique IP port
- Windows© Firewall - unblock the IP Receiver port

1.4.2 Hardware

- Minimum storage of 80G, 2G RAM
- Display – for Standalone receivers and local viewing
- Operating system: Windows XP, 7 (32/64 bit) Server 2003 R2, Server 2008/R2
- Supported web browsers:
  - Internet Explorer ver. 8.0 or higher
  - Google Chrome ver. 8.0 or higher
  - Mozilla Firefox ver. 3.6 or higher
  - Opera ver. 15.0.1147.141 or higher

4 See the Limited Support Notice at the end of this guide

2 Installation

The installation and configuration process is divided to three: application installation, Windows Process configuration, and application configuration through the Dashboard.

- You must install the IP Receiver with Windows admin privileges
- The IP receiver has an internal web service - it is important that the server is not used as a web server or host

To install the IP Receiver application, double-click the IP receiver's **shortcut icon** on the desktop and follow the instructions of the setup wizard that opens up.

- On Windows© and higher, if a ".NET Framework" error meassage is displayed, follow the instaructions and install th emissing component.
- You need to run the IP Receiver "As Administrator".

3 The Dashboard

To configure the IP receiver, you need to run the application. To do so:

1. Double-click the IP receiver shortcut on the desktop, or the file "Receiver Dashboard.exe" from its location ("C:\PIMA\IP Receiver Server", by default).
2. Double-click the IP Receiver icon on the taskbar.

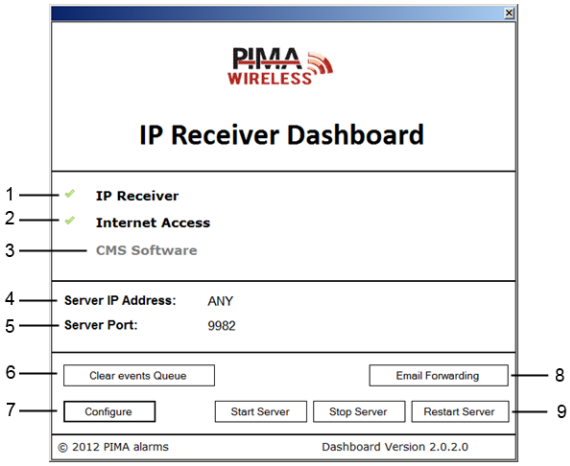


Figure 1. The dashboard

The dashboard shows the IP Receiver and Internet connection status and allows setting the various parameters of the IP Receiver and some actions, as follows:

1. **IP Receiver**: ✔ the receiver is running, ✘ the receiver is not running
2. **Internet Connection**: ✔ OK, ✘ disconnected
3. **CMS Software**: ✔ OK, ✘ disconnected

4. **Server IP address**: ANY
5. **Server Port**: the port of the receiver
6. **Clear event queue**: click this button only when asked by PIMA support
7. **Configure**: click to open the configuration screen
8. **E-mail Forwarding**: click to open the E-mail configuration screen
9. **Start, Stop, Restart Server**: click the buttons to operate the receiver

To configure the IP Receiver:

1. Click **Configure**
2. The parameters of the receiver appear in six tabs: General, Email server settings, Remote connection, Web monitor, Panels supervision, and Output protocol. See the following sections for details on each.

3.1 General

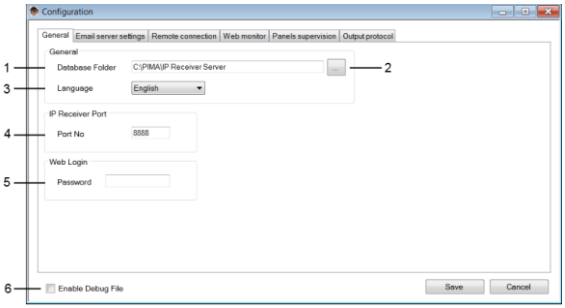


Figure 2. General tab

1. **Database folder**: set where the IP Receiver will keep its database
2. To change the default location, click the button ... and browse to select a new folder
3. **Language**: click the drop-down list to change language of the interface
4. **IP Receiver port**: set the listening port of the receiver, to which the alarm systems will send the events
5. **Web login password**: enter the password for the browser's event viewer
6. **Enable debug file**: check this option ONLY if asked by PIMA support. This file is used for debugging only.

3.2 E-mail server settings

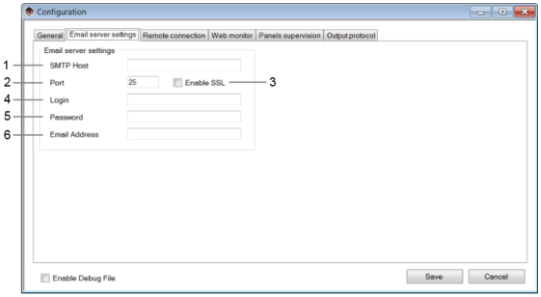


Figure 3. E-mail server settings tab

Set the SMTP parameters for forwarding events by E-mail

1-5. **SMTP Host, Port**, **Enable SSL**, **Login**, **Password**: obtain this data from the Internet Service Provider of the user

6. **Email address**: enter the e-mail address of the server (the sender of the e-mail)

3.3 Remote connection[5]

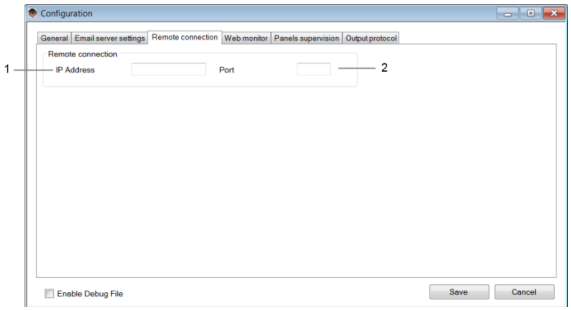


Figure 4. Remote connection tab

Set the parameters of the PC that hosts the Programming tool, for the panels to call up on request

1-2. **IP address + Port**: enter the Programming Tool data

5 Available in system ver. 2.09 and higher

3.4 Web monitor

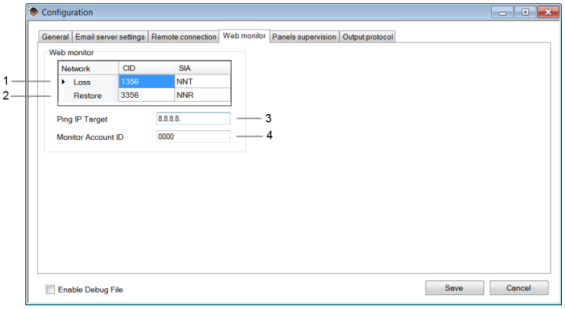


Figure 5. Web monitor tab

The web monitor allows viewing the incoming events in a web browser. Here you set loss and restore events, ping address and the account ID for monitoring the internet connection: when the connection is lost, the IP Receiver reports the CMS.

1. **Network Loss**: click and set the ContactID© (CID) and SIA corresponding events
2. **Network Restore**: click and set the ContactID© (CID) and SIA corresponding events
3. **Ping IP target**: leave the Ping IP address 8.8.8.8. (www.google.com)
4. **Monitor account ID**: enter the receiver's faults and supervision account

3.5 Panels supervision

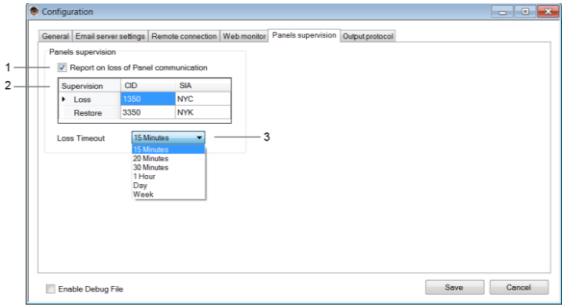


Figure 6. Panels supervision tab

Set the supervision loss and restore events and the timeout to report on control panels that stopped reporting or are reporting again after communication lost.

1. **Report on loss of panel communication**: click the checkbox to enable reporting on supervision loss and restore events

2-3. **Supervision Loss**: click and set the ContactID© (CID) and SIA corresponding events

Supervision Restore: click and set the ContactID© (CID) and SIA corresponding events

4. **Loss Timeout**: click the drop-down list and select the timeout for communication loss for all the control panels. The options are between 15 min. and one week.

3.6 Output protocol

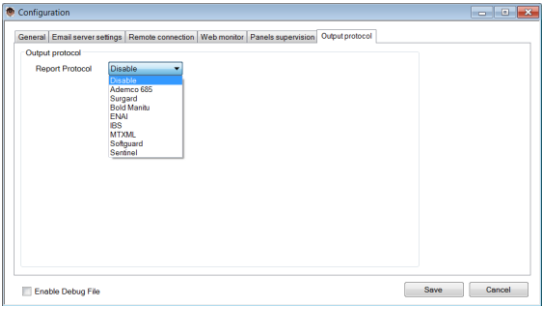


Figure 7. The output protocol tab

Click the **Report Protocol** drop-down list and select the protocol for reporting the CMS management application.

The available protocols are: Ademco 685, Surgard, Bold Manitu, ENAI, IBS, MTXML, Softguard, and Sentinel.

4 E-mail Forwarding

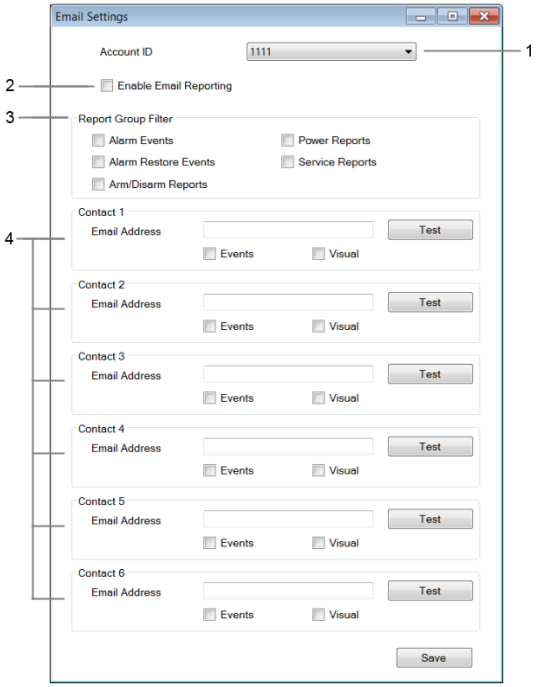


Figure 8. E-mail forwarding screen

The IP Receiver allows forwarding the incoming events to up to six contacts of any account, by E-mail.

1. **Account ID**: click the drop down list and select an account. The accounts are added automatically, as the IP Receiver receives events from the control panels
2. **Enable Email Forwarding**: check to enable this feature (per customer)
3. **Report Group Filter**: select the event group to be forwarded
4. **Contact 1-6**: for each relevant contact, enter the E-mail address
   Event: check to forward any event except visual events
   Visual: check to forward visual events
   Test: click to send a test email

To save, click **Save** and close the window.

5 The event viewer

The event viewer displays the incoming events in a web browser. To view the events:

1. Open a web browser
2. Type the **IP address** of the IP Receiver and click **Enter**.
3. If the IP Receiver resides on the same computer, type the (internal) address **127.0.0.1**
4. The login screen is opened.
5. Leave the "admin" username and enter the **Web monitor password** (see section 3.4, on page 8)
6. Click **OK**

7. The IP Receiver event viewer is displayed. The event list is automatically refreshed when a new event is received. The new event is added to the top of the list.

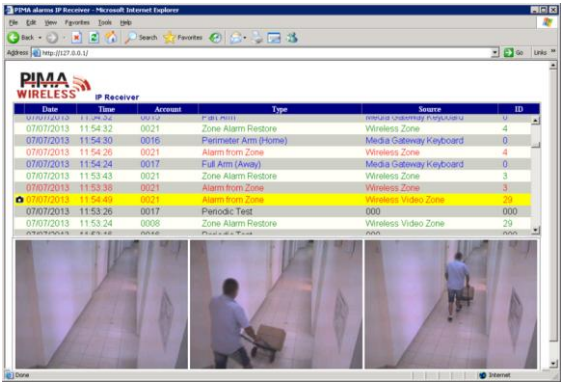


Figure 9. Event viewer with visual events

8. Clicking the event line highlights it in Yellow. If the event includes visual verification images, a camera icon is displayed to the left and the images are displayed below, as can be seen in the figure above.
9. The events are color coded, as follows:

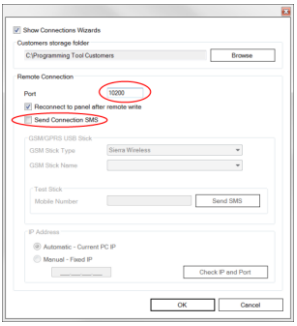
Color	Event type
Red	Zone alarm
Orange	Fire alarm
Maroon	Medical alarm
Blue	Arming\disarming
Black	Other events
Green	Restore event

Appendix A Using the IP Receiver to Connect the Programming Tool to the Alarm System

You can use the IP Receiver to initiate a connection between the Programming Tool and PIMA Wireless alarm systems, without the need to use text messages. To do so, follow the next sections.

A.1 Programming Tool settings

1. Run the **Programming Tool**. Make sure you use ver. 02.00.05 or higher
2. From the menu, select **Admin → Options**
3. Check that the listening **Port** of the application is **different** than the port of the IP Receiver[6]



The Programming Tool port must be different than the IP Receiver port

4. **Clear** the checkbox **Send Connection SMS**
5. Press **OK**

A.2 IP Receiver settings

1. Open the **Dashboard** and click **Configure** (see section 3, on page 5)
2. In the **General** tab, make sure the listening **Port** is **different** than the Programming Tool port
3. In the **Remote Connection** tab, enter the **IP address** and **Port** of the Programming Tool
4. Click **Save**

A.3 Alarm system settings

A.3.1 Installer menu[7]

1. Go to **Programming → CMS Contacts → CMS1**
   a. **IP** and **Port**: enter the IP and port of the IP Receiver
   b. **CMS Protocol**: select the protocol **GPRS-VISUAL/CID**
   c. **GPRS Always On**: select one of the **Ping** intervals
2. Go to **Programming → System Options → Remote Access → Access Mode**

6 Make sure the port is opened in the router/firewall, and is forwarded by the router where necessary. See "Limited support notice" at the end of this guide

7 System ver. 2.09 and higher

a. If **Always** is selected (and the Access Code is different than the default 531902), go to the step 3
b. If **User Initiated** is selected, go to the next section

3. Exit the **Installer** menu

A.3.2 User menu

If the **Access Mode** is set to **User Initiated**, do the following:

1. Go to **Service** → **Enable 2 hour window for Programming**
2. Select **Yes**. You will have to repeat this action after two hours, if required

A.4 How to initiate a connection?

1. Open a web browser, type the address **127.0.0.1/units** and click **Enter**

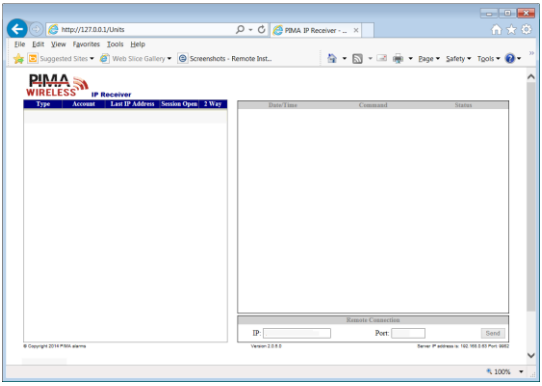


Figure 10. Units windows

2. The Units window is divided to two: the monitored alarm systems will appear on the left pane, and the two way events and remote connection commands on the right. The two way events include: Arm to the various modes, Disarm, setting the PGM output ON/OFF, Look-in image requests, and remote connection requests.
3. Click the desired alarm system. It will be highlighted in yellow.
4. On the **Remote Connection** pane (down right), enter the **IP address** and **port** of the Programming Tool. The IP Receiver will send these details to the alarm system, and the alarm system will connect to the Programming Tool using these details.
5. Click **Send**
6. In the **Programming Tool**, click the **Remote Connection** icon. When the alarm system receives the remote connection request, "Remote Connection" is displayed onscreen.
7. When connection is established with the Programming Tool, the status indicator will turn green and a 20 min connection timeout will start.
8. On the right pane the commands will start to appear as they are received

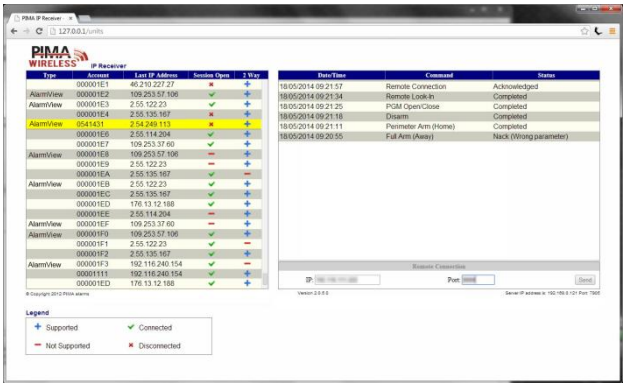


Figure 11. Units windows with events

Appendix B Limited Warranty

PIMA Electronic Systems Ltd. ("the Manufacturer") warrants its products hereinafter referred to as "the Product" or "Products" to be in conformance with its own plans and specifications and to be free of defects in materials and workmanships under normal use and service for a period of twelve (12) months from the date of shipment by the Manufacturer. The Manufacturer's obligations shall be limited within the warranty period and its option, to repair or replace the product or any part thereof. The Manufacturer shall not be responsible for dismantling and/or reinstallation charges. To exercise the warranty, the product must be returned to the Manufacturer freight prepared and insured.

The warranty does not apply in the following cases: improper installation, misuse, failure to follow installation and operating instructions, alteration, abuse, accident or tampering, and repair by anyone other than the Manufacturer.

The warranty is exclusive and expressly in lieu of all other warranties, obligations or liabilities, whether written, oral, express or implied, including any warranty of merchantability or fitness for a particular purpose, or otherwise. In no case shall the Manufacturer be liable to anyone for any consequential or incidental damages for breach of this warranty or any other warranties whatsoever, as aforesaid.

This warranty shall not be modified, varied or extended, and the Manufacturer does not authorize any person to act on its behalf in the modification, variation or extension of this warranty. This warranty shall apply to the Product only. All products, accessories or attachments of others used in conjunction with the Product, including batteries, shall be covered solely by their own warranty, if any. The Manufacturer shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, caused by the malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Products. The Manufacturer does not represent that its Product may not be compromised and/or circumvented, or that the Product will prevent any death, personal and/or bodily injury and/or damage to property resulting from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection. User understands that a properly installed and maintained alarm may only reduce the risk of events such as burglary, robbery, and fire without warning, but it is not insurance of a guarantee that such will not occur or there will be no death, personal damage and/or damage to property as a result.

The Manufacturer shall have no liability for any death, personal and/or bodily injury and/or damage to property or other loss whether direct, indirect, incidental, consequential or otherwise, based on a claim that the Product failed to function. However, if the Manufacturer is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause of origin, the Manufacturer's maximum liability shall not in any case exceed the purchase price of the Product, which shall be fixed as liquidated damages and not as penalty, and shall be the complete and exclusive remedy against the Manufacturer.

Warning: The user should follow the installation and operation instructions and among other things test the product and the whole system at least once a week. For various reasons, including, but not limited to, changes in environmental conditions, electric or electronic disruptions and tampering, the Product may not perform as expected. The user is advised to take all necessary precautions for his/her safety and the protection of his/her property.

* Patent Pending Technology

Appendix C Declaration of Conformity

FOR BETTER PROTECTION

EC Declaration of Conformity

We, the undersigned,

PIMA Electronic Systems Ltd.
Address: 5 Hatzoref Street, Holon 5885633, Israel
Phone: +972.3.6506414
Fax: +972.3.5500442
Website: www.pima-alarms.com

Certify and declare under our sole responsibility that the following equipment:

Brand	Model No/Cat. No	Product description
Burglar Alarm	AlarmView	Visual Verification Alarm Panel
	Guardian	Wireless Intruder Alarm Panel
	AVR	Add-on Visual Verification Module

Was tested to and conforms with the requirements included in following standards:

Standard	Directive
EN 60950-1:2001, A11, corrigendum 2004	Low voltage Directive 2006/95/EC
EN 301 489-1 Ver 1.4.1: 2002-08 EN 301 489-3 V1.4.1 (2002-08) EN 301 489-17 Ver 1.2.1: 2002-08 EN 50130-4:1995 , Amendment A1: 1998	EMC Directive 2004/108/EC
EN 300 328 Ver 1.4.1 (2003) EN 300 220-1 / V1.3.1 (2000-09) EN 300 220-3 / V1.3.1 (2000-09) EN 301 511-3 / V9.0.2 (2003-03)	Directive 1999/5/EC – RTTE

And therefore complies with the requirements and provisions of the Council Directives of the European Parliament.

CE marking date 19/02/2007

Certification Manager: VP & CTO

Name: Haim Dembsky

Date: Holon, ISRAEL, Jul 29th, 2013

Signature:

PIMA ELECTRONIC SYSTEMS LTD. * 5 HATZOREF ST. HOLON 58856, ISRAEL * FOR BETTER PROTECTION

CE

Hereby,

Company: PIMA Electronic Systems Ltd.

Address: 5 Hatzoref Street, Holon 5885633

Country: Israel

Telephone number: +972.3.6506414

Fax number: +972.3.5500442

PIMA Electronic Systems Ltd. declares that the AlarmView system is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Federal Communications Commission (FCC) Part 15 Statement

This equipment has been tested to FCC requirements and has been found acceptable for use. The FCC requires the following statement for your information.

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

If using an indoor antenna, have a quality outdoor antenna installed.

Reorient the receiving antenna until interference is reduced or eliminated.

Move the receiver away from the control/communicator.

Plug the control/communicator into a different outlet so that it and the receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

The user or installer may find the following booklet prepared by the Federal Communications Commission helpful: "Interference Handbook." This booklet is available from the U.S. Government Printing Office, Washington, DC 20402.

The user shall not make any changes or modifications to the equipment unless authorized by the Installation Instructions or User's Guide. Unauthorized changes or modifications could void the user's authority to operate the equipment.

RoHS compliance - All our products are lead-free

PIMA Electronic Systems is ISO 9001 certified

All data contained herein is subject to change without prior notice.
PIMA Electronic Systems Ltd.
* Patent Pending Technology

Appendix D End-User License Agreement

Important - Read Carefully:
This End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and PIMA Security Ltd. for the AlarmView GPRS-IP Receiver SOFTWARE(s) identified above, which includes the User's Guide, any associated SOFTWARE components, any media, any printed materials other than the User's Guide, and any "online" or electronic documentation ("SOFTWARE"). By installing, copying, or otherwise using the SOFTWARE, you agree to be bound by the terms of this EULA. If you do not agree to the terms of this EULA, do not install or use the SOFTWARE. If the SOFTWARE was mailed to you, return the media envelope UNOPENED, along with the rest of the package, to the location where you obtained it, within 30 days from purchase.

The SOFTWARE is licensed, not sold.

Grant of License

a) You may use the SOFTWARE as part of your Alarm View System package.

b) You may make copies of the SOFTWARE as you wish for your own use only; you may not transfer copies of the software to any 3rd party nor charge any fee for the copy or use of the SOFTWARE itself.

Restrictions
You may not reverse engineer, de-compile, or disassemble the SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation. You may not rent, lease, or lend the SOFTWARE. You may permanently transfer all of your rights under this EULA, provided the recipient agrees to the terms of this EULA. You may not use the SOFTWARE to perform any unauthorized transfer of information (e.g., transfer of files in violation of a copyright) or for any illegal purpose.

Support Services
PIMA may provide you with support services related to the SOFTWARE. Use of Support Services is governed by the PIMA polices and programs described in the user manual, in online documentation, and/or other PIMA-provided materials, as they may be modified from time to time. Any supplemental SOFTWARE code provided to you as part of the Support Services shall be considered part of the SOFTWARE and subject to the terms and conditions of this EULA. With respect to technical information you provide to PIMA as part of the Support Services, PIMA may use such information for its business purposes, including for product support and development. PIMA will not utilize such technical information in a form that personally identifies you.

Termination
Without prejudice to any other rights, PIMA may terminate this EULA if you fail to comply with the terms and conditions of this EULA. In such event, you must destroy all copies of the SOFTWARE.

Copyright
The SOFTWARE is protected by United States copyright law and international treaty provisions. You acknowledge that no title to the intellectual property in the SOFTWARE is transferred to you. You further acknowledge that title and full ownership rights to the SOFTWARE will remain the exclusive property of PIMA and you will not acquire any rights to the SOFTWARE except as expressly set forth in this license. You agree that any copies of the SOFTWARE will contain the same proprietary notices which appear on and in the SOFTWARE.

No Warranties
PIMA expressly disclaims any warranty for the SOFTWARE. The software and any related documentation is provided "as is" without warranty of any kind, either express or implied, including, without limitation, the implied warranties or merchantability, fitness for a particular purpose, or non-infringement. The entire risk arising out of use or performance of the software remains with you.

Limitation of liability

In no event shall PIMA or its suppliers be liable to you for any consequential, special, incidental, or indirect damages of any kind arising out of the delivery, performance, or use of the software, including loss of profits, loss of business, loss of data, or loss of use, system crash, disk/system damage, regardless of the form or base of action. These limitations apply even if PIMA has been advised of the possibility of such damages and regardless to the form of action, whether for breach of contract, tort, product liability or any other theory of liability. In no event will the aggregate liability of PIMA or its suppliers for any claim, whether for breach of contract, tort, product liability or any other theory of liability, exceed the greater of U.S. $1.00 or license fee paid by you. You agree to the allocation of liability set forth in this section and acknowledge that without your agreement to these limitations, the fees charged for the license would be substantially higher.

Limited support notice:

Due to the diverse mix of networks, we are not able to offer support on routers, modems, switches or any other network/internet related devices or services.

Our support for internet or network related features, that are not directly related to the product are limited.

The following must be completed before calling our support team with network/internet related features:

1. Your network/internet must be configured and working
2. IP address and port number for the product must be pre- configured on the network
3. Also, have the following information available: default Gateway, Subnet mask, port numbers and all other network information

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