SENTRY

DIGITAL STANDALONE RECEIVER

INSTALLATION GUIDE

FOR BETTER PROTECTION

CE

Pima Electronic Systems Ltd.
www.pima-alarms.com

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Table of Contents

Introduction 3
Key Features 3
Advantages 3
Components & Architecture 4
The product package content 4
Safety instructions 5
Installation 5
Initial operation & tests 5
Radio test 5
PSTN test 6
Accessing the Sentry Remotely 6
Troubleshooting 7
Tech specs 7

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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 environment 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.

All efforts have been made to ensure that the content of this manual is accurate. Pima retains the right to modify this manual or any part thereof, from time to time, without serving any prior notice of such modification.

Please read this manual in its entirety before attempting to program or operate your system. Should you misunderstand any part of this manual, please contact the supplier or installer of this system.

INTRODUCTION

This guide will introduce you with the Sentry, a PIMA advanced digital standalone receiver for Monitoring Stations. The Sentry supports Telephone, Radio and Ethernet communication; it can receive events from thousands intruder alarm systems and process them to the Monitoring Station management application via serial (RS-232) channel or network (Ethernet).

The Sentry is controlled and monitored by the PimaGuard application. For any issue related to the protocols supported by the Sentry, or upgrading its driver, or making any change to its configuration, refer to the PimaGuard guide.

Key Features

- 4 PSTN inputs;
- 2 Radio inputs;
- Supports most PSTN protocols: PAF, NPAF, PID, CID, SIA, PULSE and more[1];
- Supports most Radio protocols: PAF, NPAF, PID, Milcol-D, Intrac-2000 and more[1];
- Supports Central Monitoring Station management applications such as Surgard, Ademco 685 and more[1];
- COM and Ethernet interfaces to Monitoring Station's management applications;
- AC power and a backup battery;
- Can be remotely controlled.

Advantages

- Not dependant on any other computer in the Monitoring Station.
- Keeps working even when the Monitoring Station's computer or management application malfunctions.
- Saves events to memory in case of a failure of the Monitoring Station's management application or of the communication.
- UPS (Uninterruptable Power Supply) is not required.

[1] Detailed information can be found in the PimaGuard guide, in Appendix F.

Components & Architecture

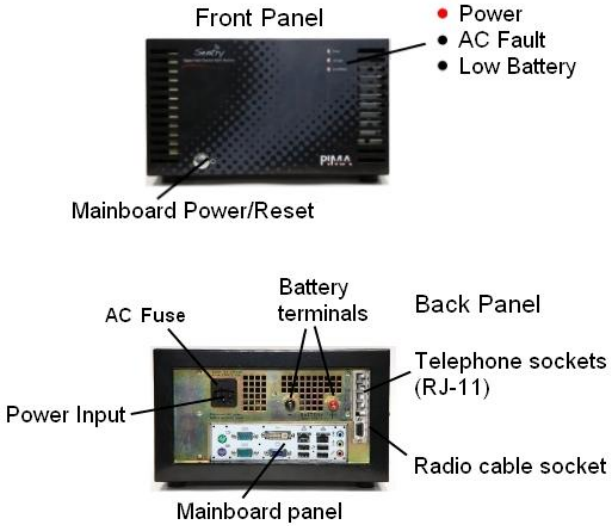

Figure 1. The front & back panels

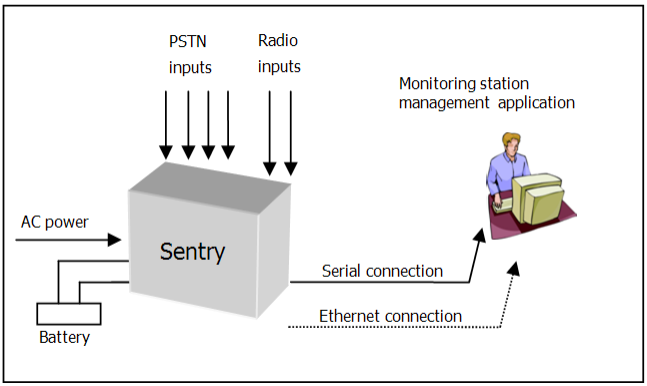

Figure 2. Mode of operation

The product package content

- The Sentry box;
- AC cord;
- Battery cables with a fuse holder;
- Radio transceiver cable with a D-type connector.

Safety instructions

- The Sentry must be connected to ground;
- To use a radio transceiver, connect the screw-nut on the Sentry's back panel to solid ground with a thick conductor.

INSTALLATION

1. Place the Sentry on a firm surface.

Follow the next steps according to your requirements:

2. Connect telephone cables to the RJ-11 sockets on the back panel. See the image on the previous page.
3. Connect the supplied radio cable (P/N 3411055) to the radio receiver and to the Sentry. The wiring is described in the next table.

Wire	**Use**	**Radio**
Red	PTT	PTT
White	DATA Out	Audio Input
Green	DATA In	Audio Output
Black	Volume	Volume control
Yellow	GND	GND

4. Connect a network cable to one of the RJ-45 sockets on the back panel.
5. Turn OFF the ON/OFF switch on the back panel.
6. Connect the supplied AC cord.
7. Connect a 12V Lead-Acid battery to the terminals on the back panel. **CAUTION**: **observe battery polarity**.
8. Connect the Sentry to the Monitoring Station management application (e.g. PIMA's Andromeda) using a crossbred RS-232 or network cables (these cables are not supplied by PIMA).

INITIAL OPERATION & TESTS

The Sentry is configured to automatically startup when it is being connected to mains. After connecting it, do the following:

1. Verify that the Power LED on the front panel illuminates.
2. Verify that the AC Fault LED on the front panel does not illuminate. If it does, check the AC cord.
3. Verify that the Low Battery LED on the front panel does not illuminate. If it does, check that the battery is charged and connected to the battery terminals.

Radio test

1. In the alarm system, verify the station number and frequency are configured correctly.
2. Trigger various events and send them over the radio.

3. Verify that the events are received by the monitoring station.

Tip: connect a 50Ω termination instead of an antenna; transmitting with an antenna too close to the radio receiver may saturate it.

PSTN test

1. In the alarm system, verify the programming of the monitoring station's PSTN protocol and telephone number(s).
2. Trigger various events in the control panel and send them over the telephone.
3. Verify that the events are received in the monitoring station.

ACCESSING THE SENTRY REMOTELY

1. To access the Sentry remotely via the network, use any remote desktop application. If you use Windows Remote Desktop[1] application (recommend), forward port 3389 to the Sentry or its Router. For instructions, refer to www.portforward.com.
   - The Sentry must have a static IP address (LAN or WAN).
   - You can use a DDNS service[2] and access the Sentry using Internet address (URL).
2. The Sentry is provided with the UltraVNC (www.uvnc.com) free[3] remote desktop application. It is configured with the password "sentry". To use it:
   a) Forward port 5900 to the Sentry or its Router. For instructions, refer to www.portforward.com;
   b) On the remote computer, browse to www.uvnc.com/download/index.html and download the application;
   c) Install the application and run the 'Client Viewer';
   d) Enter the Sentry's IP address (or a URL if you use DDNS).

[1] For instructions for Windows XP, browse to: http://www.microsoft.com/windowsxp/using/mobility/getstarted/remoteintro.mspx;
For Windows 7, browse to http://windows.microsoft.com/en-US/windows7/Connect-to-another-computer-using-Remote-Desktop-Connection;

[2] See, for example, www.dyndns.com or www.no-ip.com.

[3] As of the time this guide is written, the application is free. Another free application that can be used is TeamViewer (www.teamviewer.com).

TROUBLESHOOTING

In case of system malfunction, use the following table for troubleshooting. To shut down the Sentry, press the Power button shortly.

Fault	Resolving
Low Battery LED illuminates	• Verify that the battery supplies 12V; if not, replace it or wait for recharging, if the battery had been discharged; • Check the battery cables; • Check the battery fuse.
AC Fault LED illuminates	• Check the AC fuse on back panel (see Figure 1); • Check the AC cord and outlet.
Events are not received via the radio channel(s)	• Check the radio cable; • Check the transceiver's frequency;
Events are not received via the PSTN channel(s)	• Check the PSTN cable and sockets; • Verify that the telephone numbers are programmed correctly in the control panel; • Check that the PimaGuard's driver is configured properly.
The monitoring station software does not receive events	• Check the connection between the monitoring station's PC and the Sentry; • Check that the PimaGuard's driver is configured properly. Use the PimaGuard guide for details.

TECH SPECS

- 4 PSTN lines;
- 2 radio transceivers;
- LAN (Ethernet) output;
- 2 RS-232 ports;
- 4 USB ports;
- Power input: 90VAC~240VAC;
- Backup battery: 12V, Lead-Acid, up to 20AH;
- Frequency: 47 to 63 Hz;
- Power consumption: 50W;
- Network interface: 10/100MB Ethernet, TCP/IP, UDP;
- Operating temperature: -10 to +40 C;
- Dimensions: 29.5/26.5/16.5 (L/W/H);
- Weight: ~5.150 Kg;

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