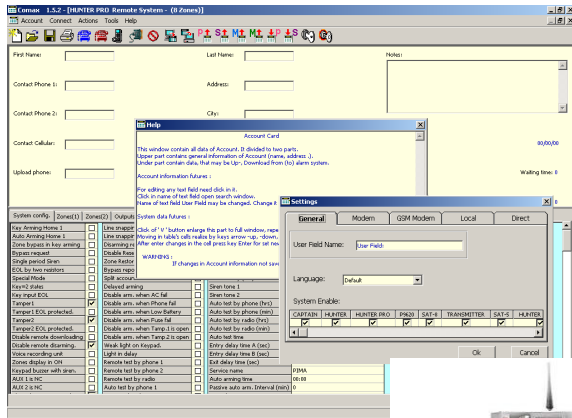


## COMAX Version 2.0

### Control & Programming Software for PIMA Systems

Including PIMA's New HUNTER-PRO 896 Intruder Alarm System!



# INSTALL & USE GUIDE

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

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### **Contact US:**

PIMA Electronic Systems Ltd.

5 Hatzoref Street, Holon 58856, Israel

Tel: +972-3-6506444 Fax: +972-3-5500442

Email: [support@pima-alarms.com](mailto:support@pima-alarms.com)

Web: [www.pima-alarms.com](http://www.pima-alarms.com)

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# 1 Introduction

COMAX is PIMA Electronic Systems software for connecting locally or remotely to its control panels and radio transmitters, in order to upload & download parameters, program devices and monitor the systems. It is also used to upload PIMA's PRG-22/PRG-896 fast programmers.

COMAX is a Windows™ based software that remotely connects to PIMA's alarm systems, using PIMA modem, and locally using LCL-11A and DPR-33/44 adapters.

## 1.1 Version 2.0 New Features

1. Support in HUNTER-PRO 896 ver. 2.0.
2. Two systems have been added: GSM-200 & Net4pro (IP net card).
3. Uploading & downloading of selected parameters/screens (available in HUNTER-PRO 896 only).
4. Contact the system using its cellular line.
5. Working over LAN network: The customers file can now be saved everywhere in the network and be accessed by all the users.

## 1.2 System Requirements

### 1.2.1 Hardware

- PC compatible computer<sup>1</sup>, VGA monitor, a CD drive and a free 9-pin<sup>2</sup> D-type serial port (RS-232)
- LCL-11A Adapter (for local programming)
- DPR-33/44 Adapter (for direct programming)
- TC-3 Technician Cable and an LCD keypad<sup>3</sup> (optional for local programming)
- PIMA custom modem P/N 5200010 (for remote programming)

---

**Note:** In case the PC has only USB adapter, it is necessary to use a "USB to SERIAL" adapter.

---

### 1.2.2 Software

- Windows operating system versions 98 SE through XP
- 10 MB free hard disk space

- 
- 1 A Pentium II 450 MHz or higher with display adapter with 2MB memory
  - 2 A 25-pin to 9-pin adaptor (not included) can be used where a 9-pin socket is not available.
  - 3 To check the keypad version, reconnect it to the control panel and watch the initialization string. It should say: RX-xxx VER 10

## 1.3 COMAX Main Features

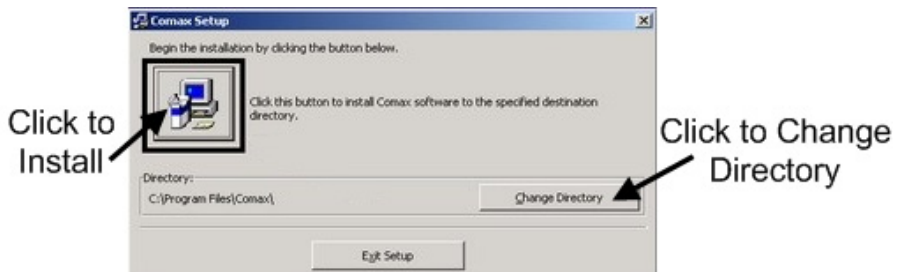
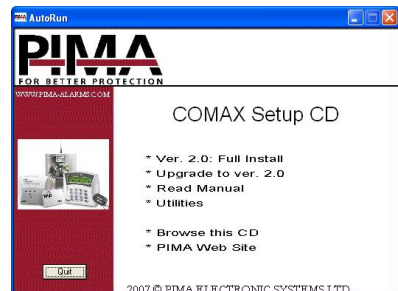
- ✦ Remote and local communication with control panels
- ✦ Supports all PIMA systems using the same software
- ✦ Remote and local programming
- ✦ Remote and local uploading parameters
- ✦ Remote and local upload system history log
- ✦ Remote and local online system status
- ✦ Remote Arming/Disarming the system (including partitions)
- ✦ Managing customer configuration parameters in files
- ✦ Comparing uploaded parameters to customer's parameter file
- ✦ Multiple users with various levels of authorization
- ✦ Call-Back option

## 2 Installing the COMAX

### IMPORTANT!

**Before installing the COMAX, it is recommended to close all running applications.**

1. Insert the COMAX CD into your CD drive. Wait for the next screen to display.
2. Click on "Ver. 2.0. Full Install" (for upgrade instructions see next section).
3. In the next screen read the message and click OK.



**Notes:**

1. If the installation window does not appear after inserting the CD, double click on the file "setup.exe" on the CD.
2. If Windows system files on the CD are newer than those on your PC, you will automatically be asked to update them. In such a case you will have to reboot your PC before proceeding with installation.

4. Click the install button. The default installation directory is: "C:\Program Files\Comax". If you want to install COMAX in a different directory, click on "Change Directory" and choose a different destination.

**Note:** If you choose to install COMAX not in its default directory, in any software upgrade in the future you will have to manually update the COMAX in your chosen directory.

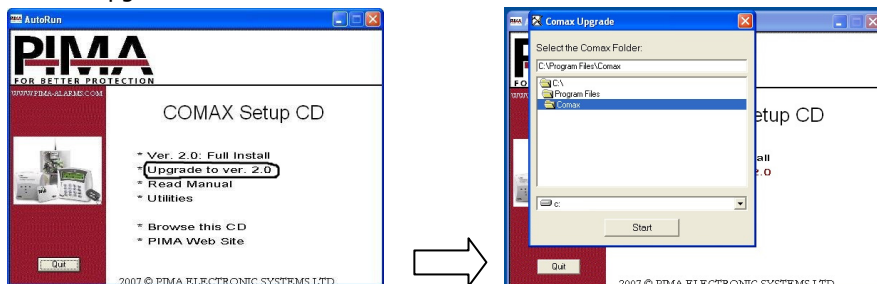
5. Follow the installation steps.
6. Installation ends successfully with the message: "Comax Setup was Completed Successfully".

**Note:** When installation is finished there might be an error when trying to create a shortcut to the comax.exe file (located in "C:\Program Files\Comax") on your desktop. Options in this screen would be "Abort/Ignore/Cancel". Click "Ignore" and manually create the shortcut if you wish.

## 2.1 Upgrading Procedure


The COMAX CD includes files for upgrading your COMAX version, in case needed. Please follow the next steps:

1. If opened, close your COMAX application.
2. Insert the COMAX CD to your CD player.
3. Click "Upgrade".



4. Click "Start". If the COMAX was installed in a different directory, manually find the Comax folder.
5. Wait for message "the Comax was successfully upgraded" to appear and click OK.
6. If your version is already updated, the next message is displayed: "Upgrading is not needed! Updated version is installed".

### 3 Running COMAX for the First Time

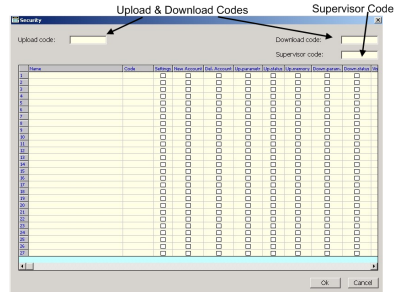
To run the program (not just for the first time), either click **Start** → **All Programs** → **Comax** → **Comax**, or double-click the shortcut icon  on the desktop.

#### 3.1 Setting-up Codes, Users and Privileges

1. The first time COMAX starts, some parameters must be configured.

**Note:** The configuration screen is displayed upon first time the COMAX is running or when logging-in with the supervisor code.

2. Enter six characters hexadecimal<sup>1</sup> number for Upload and Download codes.



Users and privileges screen

**Note:** Upload and download codes MUST be identical (for more information, see the Glossary on page 29).

3. Enter a six characters alphanumeric code (password) for the application supervisor. Only digits and letters are allowed.
4. Setup the COMAX users and their privileges by applying the following parameters:

Parameter	Characters
Name	Alphanumeric. 0 to 20 characters
Code	Alphanumeric. 6 characters
-	<b>Privileges</b>
Settings	The user is enabled to change application settings
New Account	The user is enabled to create new customers
Del. Account	The user is enabled to delete customer files from the database
Up. parameter	The user is enabled to upload parameters from a connected control panel
Up. status	The user is enabled to get online status of a connected control panel
Up. memory	The user is enabled to upload the history log from the control panel memory
Down. param.	The user is enabled to download new parameters to a connected control panel
Down. status	The user is enabled to download zone and other on-line status parameters to the connected control panel
Visible Phone	The user is enabled to view and edit customer's telephone numbers

<sup>1</sup> Digits 0 – 9, letters A - F

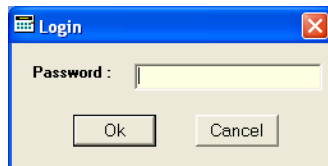
Parameter	Characters
Visible Code	The user is enabled to view and edit the different activation codes (e.g., Master Code, User Code, etc.)
Arm/Disarm	The user is enabled to arm & disarm the customer’s system.

**IMPORTANT!**

**A. At least one user needs to be set for the COMAX to run.**


**B. The system can have as much as 27 different users with different sets of privileges.**

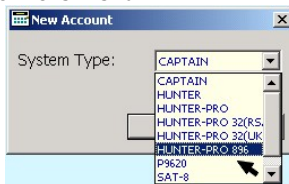
- To save changes made in the configuration screen, click OK. Otherwise, click Cancel to discard the changes.
- In the login screen, enter a valid user’s password (no need to enter username).



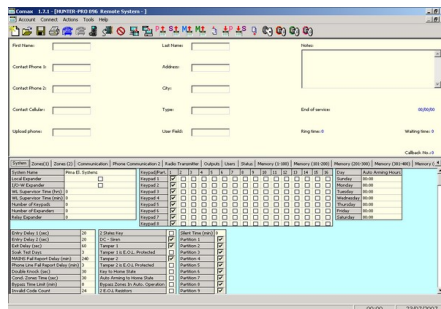
COMAX Login Screen

## 4 Setting a New Account

- Click  or select **Account** → **New** from the Menu.
- Select the account’s system/s<sup>5</sup>. An account can only apply to one system.



- Click **OK**.



COMAX main screen

- To program the PRG-22, select the Control Panel it is intended to program.

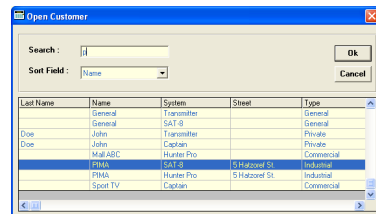
## 4.1 Open an Account

To open an existing account, click  or select **Account** → **Open**.

The account is selected either by double clicking the account line or by selecting it and then clicking **OK**.

**Note:** When using a backup file (e.g. if the file is corrupted), the first login must be done with the supervisor's password, and only after that the users can login with their codes. This is done due to security reasons.

The table can be sorted by any of the field names, and can be searched by the product name or any other parameter in the table.



Selecting a Customer Record to Open

## 4.2 Releasing a Locked Account

When a user opens an account, it becomes locked to all other users: they can view the account but cannot make any changes into it (Read only) as long as it is locked.

If, during working on a record, the PC shuts down or "freezes", the account may stay locked to all the users. To unlock it, make sure all the users log out and choose **"Tools → Unlock Accounts"** from the main screen menu.

## 4.3 The Account Fields

First Name: <input type="text"/>	Last Name: <input type="text"/>	Notes: <input type="text"/>
Contact Phone 1: <input type="text"/>	Address: <input type="text"/>	
Contact Phone 2: <input type="text"/>	City: <input type="text"/>	
Contact Cellular: <input type="text"/>	Type: <input type="text"/>	End of services: 00/00/00
Upload phone: <input type="text"/>	User Field: <input type="text"/>	Ring time: 0      Waiting time: 0
Callback No.: 0		

Field	Value	Note
First Name	Alphanumeric	Up to 20 characters
Last Name	Alphanumeric	Up to 20 characters
Contact Phone1	Number	Up to 20 characters
Contact Phone2	Number	Up to 20 characters

Field	Value	Note
Contact Cellular	Number	Up to 20 characters
Upload Phone	Number	Up to 20 characters
Address	Alphanumeric	Up to 20 characters
City	Alphanumeric	Up to 20 characters
Type	Alphanumeric	List select
User Field	Alphanumeric	A custom field
Note	Free text	Up to 255 characters
End of Service	Date	DD/MM/YY
Ring time	Number	Time in seconds for the first call to the system, in '2 rings line snapping' (advised 10-15 sec.)
Waiting time	Number	Timeout in seconds between the first and second calls, in '2 rings line snapping' (advised 10-15 sec.)
Callback No.	Number	The call-back phone number <sup>6</sup>

## 5 Account Settings

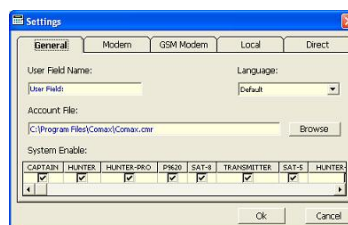
From main screen, click **Tools** → **Settings** (see next screenshot)

A window is displayed with 5 tabs: **General**, **Modem**, **GSM Modem**, **Local**, **Direct**. These tabs are used to configure the COMAX communication channels. Following is a description of each tab:

### 5.1 General Tab

The **General** tab has 4 sections: **User Field Name**, **Language**, **Account File** and **System Enable**:

1. **User Field Name:** The text in this field appears on the customer information area, in the main screen.
2. **Language:** The COMAX's default language. Additional languages are available.
3. **Account File:** The name and path to the customers file.
4. **System Enable:** Check the system/s you want the COMAX to configure. By checking a system (i.e. HUNTER-PRO) its default setup screens become



<sup>6</sup> If there are several phone numbers programmed as call-back numbers, this field sets which of the numbers shall be used.

available in “Setting a New Account” (page 9). Notice that this part in the screen can be scrolled.

5. To save, click **OK**.

## 5.2 Working in Local Network (LAN)

Starting this version, the COMAX is configured to work in a local network with all the users sharing the same customers file. To enable it, follow these steps:

1. After installing COMAX move the 'cmr' account file, located in the COMAX installation folder (c:\program files\comax by default), to a shared folder in the network.
2. Make sure this shared folder is accessible with read/write privileges to all users.
3. Wherever the COMAX is installed in the network, change the Account file path (see previous screen capture) to its current location.

---

**Note:** 2 users cannot work on the same subscriber account simultaneously (but can work on different accounts simultaneously). Once opened by a user, the record is locked until the user is done. When trying to save/delete a locked record, an error message is displayed.

---

## 5.3 PSTN Modem Tab

The modem tab refers to PIMA's PSTN (Landline) modem.

1. Set the **Modem Port** to the port you connect the MODEM to (e.g., COM1, COM2, etc.)
2. Set the dialing prefix number if needed.
3. Verify that the initialization string is:



**T&D1 S0=0 S7=60 S9=1 S10=255 &K0 (0=Zero)**<sup>7</sup>

4. To initialize the modem every boot up, check **Init at Startup** checkbox. If not marked, the modem is initialized only when trying to communicate with it.
5. Connect the modem. For instructions, see page 19.
6. Click the **Modem Test** button. The test result is displayed after a few seconds.
7. Verify that the test ends successfully with the message “Modem setting is successful”. If the test fails an error message appears: “Modem is not responding”. If the MODEM COM port is busy the error message is “Error in the modem port”. Check the port number, the initialization string and that no other application or TSR<sup>8</sup> is using the MODEM port.
8. Click **OK**.

---

<sup>7</sup> PIMA advises to add L3M2 to monitor the communication.

<sup>8</sup> Terminate and Stay Resident applications usually launch whenever Windows boots-up.

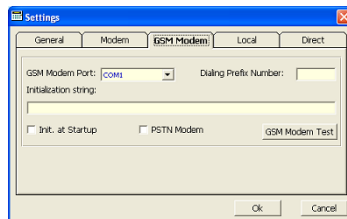
## 5.4 GSM Modem Tab

This section is applicable only for the new HUNTER-PRO 896 ver. 2.0 & up.

### IMPORTANT!

**Connecting the panel with GSM-200 is available only through the DATA channel!**

1. Set the **GSM Modem Port** (e.g., COM1, COM2, etc.)
2. Supported GSM modems are: Siemens TC35T (for external modem) and Siera Laptop (for PCMCIA). The initialization string should not be changed.
3. Connect the modem. For instructions, see page 19.
4. Click the **Modem Test** button. The test result is displayed after a few seconds
5. Verify that the test passes OK (see previous section). If the MODEM test fails or if the MODEM COM port is wrong, check the port number, the initialization string, and that no other application or TSR<sup>2</sup> is using the MODEM port.
6. Click OK.



GSM modem configuration tab

### 5.4.1 Calling the GSM Data Channel Using PSTN Modem

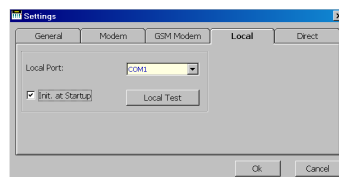
To call the GSM-200 **data** channel using PSTN modem:

1. Check the PSTN modem checkbox.
2. Use the following initialization string: &D1 &K0 S10=255 S0=2 S9=1 X0
3. Click OK

## 5.5 Local Tab

Configure the local connection parameters.

1. Set the **Local Port** to the port number you have connected the LCL-11A to (e.g., COM1, COM2, etc.)
2. To initiate local programming when starting COMAX, click the **Init. At Startup** box
3. Click the **Local Test** button. the test result is displayed after a few seconds
4. Verify that the test ends OK with the message "Local port setting is successful". If the test fails, the message would be "Error in the local port". Check that the port number is correct and that no other application or TSR<sup>9</sup> is using the port.



Local Port Settings

<sup>9</sup> Terminate and Stay Resident applications usually launch whenever Windows boots-up.

**IMPORTANT!**

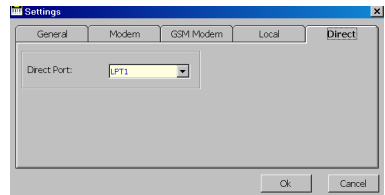
The Local Test only checks for conflicts with the port settings in the windows operating system. A successful test message indicates that the port exists and it's available to the COMAX software. It does not indicate that the LCL-11A is connected or that the selected port number is the correct one.

5. Click OK

## 5.6 Direct Tab

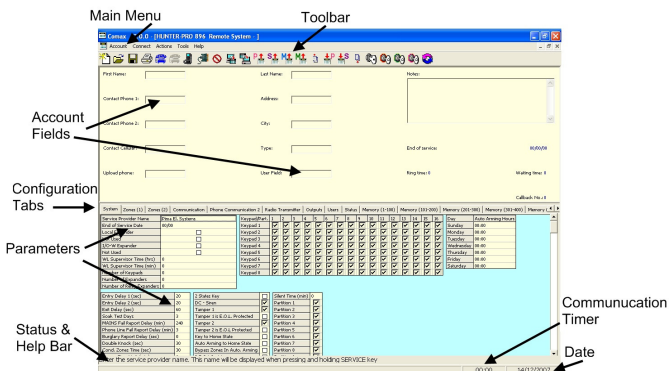
Configure direct connection for the fast programmes PRG-22/896 or the SAT-8/ SAT-9 radio transmitters.

1. Set the **Direct Port** to the output you have connected the DPR-33/44 to, e.g., LPT1, LPT2.
2. Click OK



Direct port settings

## 6 The COMAX Main Window



### 6.1 The Menu Bar

The COMAX can be navigated both by the mouse and the keyboard. As in any Microsoft Windows menu, all menus are accessible by pressing the 'Alt' key, then using the arrow keys to reach the desired sub-menu and then click enter.

## 6.2 The Toolbar

The Toolbar includes the following tools (icons):



**New:** Create a new customer record.



**Open:** Open a customer record from the customers file.



**Save:** Save data to the customer record.



**Print:** Send current data to printer.



**Dial:** Dial the customer's panel via modem.



**Dialing with Snapping:** Dial a customer's panel via modem where line snapping is used. By this, the PIMA panel monitors the line and intercepts the call as soon as it identifies the COMAX modem.



**GSM Dial:** Dial a customer's panel via GSM modem.



**Connect Locally:** Connect to a customer's panel locally via LCL-11A. See each panel's installation guide for specific instructions.



**Disconnect:** Disconnect communication from a customer's panel.



**Direct Write:** Download data to the local device.



**Direct Read:** Upload data from the local device.

---

**Note:** Upload & download codes must be identical for the COMAX to connect to the panel.

---



**Upload Parameters:** Upload parameters from the connected panel.



**Upload Status:** Upload status from the connected panel.



**Upload Memory:** Upload memory (events log) from the connected panel (the number varies according to system).



**Upload Memory (extra):** Upload memory (events log) from the connected panel.



**Upload selected fields:** Upload only selected fields, tables or tabs (Available only from HUNTER-PRO 896)



**Download Parameters:** Download parameters to the connected panel.



**Download Status:** Download status to the connected panel.



**Download selected fields:** Download only selected fields, tables or tabs. (Available only from HUNTER-PRO 896)



**Disarm the Panel:** Disarm the connected panel.

**IMPORTANT!**

**After disarming the panel the system disconnects the COMAX**



**Arm the Panel:** Arm the connected panel.



**Partially Disarm the Panel:** Partially disarm the connected panel.



**Partially Arm the Panel:** Partially arm the connected panel.



**Delete Alarms:** Resets alarms display (Available in hunter-pro 32, RSA and 896).


## 6.3 Shortcut Keys

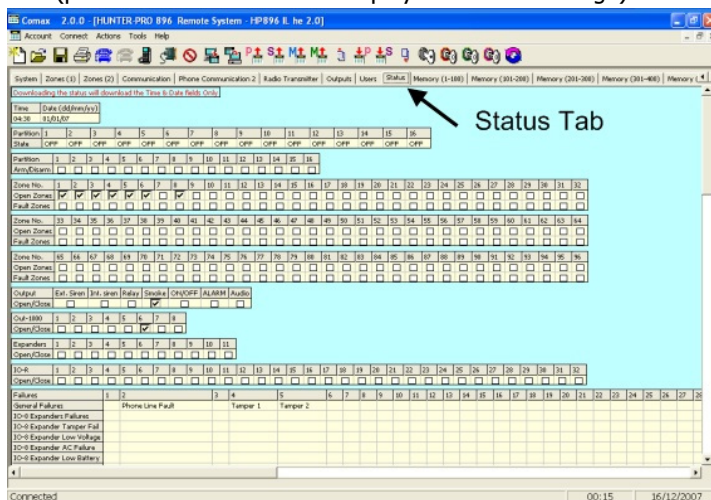
The COMAX menus are directly accessible by holding either the 'Ctrl' or the 'Shift' keys and pressing a letter key, or one of the functions keys, all listed in the next table.

Function	Shortcut keys
<b>Data</b>	
New Customer Record	Ctrl + N
Open Customer's Record	Ctrl + O
Save Customer's Record	Ctrl + S
Verify Screen Data to Saved Record	Ctrl + F
Print Data	Ctrl + P
<b>Communication</b>	
Dial to Customer's Control Panel	Ctrl + D
Local Connect Device (via LCL-11A)	Ctrl + L
Disconnect from Device	Ctrl + Q
<b>Device Configuration</b>	
Upload Parameters	F5
Upload Status	F7
Upload Memory (device dependent)	F6
Upload Memory (device dependent)	F8
Download Parameters	Shift + F5
Download Status (Available is some systems)	Shift + F7
<b>Arm/Disarm</b>	
Disarm the Connected Alarm System (Available is some systems)	Shift + F8
Arm the Connected Alarm System (Available is some systems)	Shift + F9
<b>General</b>	
Help	F1

## 6.4 Online Status & Status Bar

In HUNTER-PRO 896 there are two ways to update and display the status of the connected system:

- 1) Click the Status tab (see next image).
- 2) Click the Upload status . The COMAX is immediately updated.
- 3) Choose "Tools/Status Online" from main menu. This will update the COMAX once a minute (provided the status tab is displayed. See next image) automatically.



Status Tab

- 4) The status bar shows Help text. The text is displayed in accordance with the screen or parameter in work.

In CAPTAIN-I, only when connecting to the system the status is updated once. To update again, disconnect and connect again.

## 7 The System Configuration Tabs

The tabs below the account fields are the system configuration tabs. These tabs contain all the parameters to program and they differ according to the system. Some include System, Zones, Communication, Radio Transmitter, Outputs, Users, Status, Memory etc.

## 8 Managing Customers Accounts

A customer account includes all the customer information and the parameters of its system its installed devices.

---

**Note:** There can be only one device per record. When a customer has more than one device, a new record needs to be created for each new device.

---

COMAX keeps a database containing all the accounts settings. Adding & saving a new account automatically saves it into the database.

### 8.1 Database Options

#### 8.1.1 Sort the Database List

The list is sorted according to the field selected in the **Sort Field**.

#### 8.1.2 Search the Database List

Searching is done by typing the value that is looked for, in the **Search** box. The search is done on the field that is being sorted.

#### 8.1.3 Save a New Customer Record

When a Customer Record has been modified, either it can be saved by replacing the old record or it can be saved as a new record.

---

**IMPORTANT!**

**COMAX does not check for duplications in customer information fields. Therefore, to prevent any confusion, make sure not to have duplicated records.**

---

#### 8.1.4 Save and Replace an account

---

**IMPORTANT!**

**Comax does not check for duplicate accounts. Therefore, beware not to have more than one copy of an account**

---

To save and replace an account, click  or select **Account** → **Save**.

#### 8.1.4.1 Save as New Account

To save as new account, select **Customer** → **Save as New**.

#### 8.1.5 Delete a Customer Account

To delete a Customer Record from the database, open it and select **Account** → **Delete**.

---

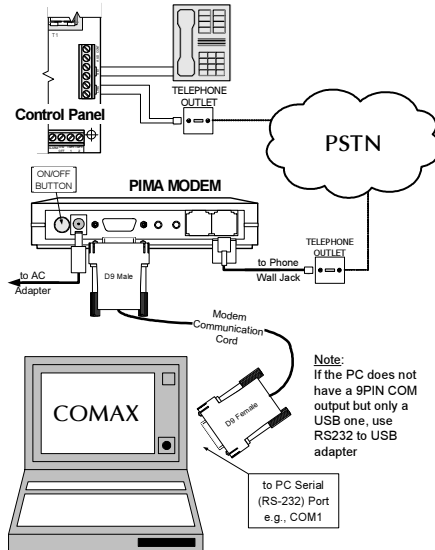
**Note:** When modifying only the device parameters, you can hide the customer's information by double clicking on the empty bottom right side of the parameters window.

---

## 9 Connecting Communication Devices

COMAX can connect to PIMA control panels either locally, via LCL-11A Adapter connected to a serial port (or serial to USB adaptor), or remotely, via PSTN or GSM modems. COMAX can also program Radio Transmitters with the DPR-44, and PIMA Fast Programmer PRG-22/896 with DPR-33 adapter, connected to the parallel printer port (see System Requirements on page 5).

### 9.1 Connecting PIMA modem



Modem connection illustration

To program the COMAX remotely, an external PIMA modem (P/N 5200010) is required. The modem needs to be connected to the PC and configured within COMAX.

**Note:** You may use any other modem that supports Bell 103/300 baud format. However, such a modem is not supported by PIMA and can cause faults.

Follow these steps to connect the PIMA external modem:

1. Connect the modem's female D9 connector Communication Cord to the computer's serial port. If there is no serial output but only USB port, use Serial to USB adaptor.

**Note:** Check for the number of this port (i.e., COM1, COM2, etc.).

2. Connect the other end (male D-type) to the modem rear.

3. Connect the phone cable between the modem and the wall jack<sup>10</sup>
4. Connect the AC adapter to the modem and to the AC outlet

---

### **IMPORTANT!**

**Ensure that the AC adapter is suitable for the voltage range in your area.**

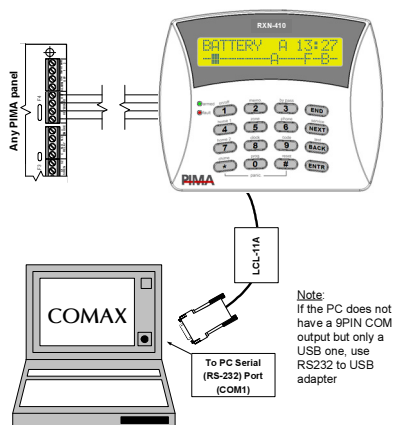
---

5. Turn-on the modem by clicking the ON/OFF button. The PWR LED should turn ON.

## **9.2 Connecting with LCL-11A Adapter**

Connect the LCL-11A adapter to the PC and to the device that needs programming (control panel, transmitter etc.) and follow the next steps:

1. Connect the D-type connector of the LCL-11A to the computer's serial port (or to a USB port with a serial to USB adaptor).



Connecting the PC and the Keypad with LCL-11A

---

**Note:** Check for the port number (i.e., COM1, COM2, etc.).

---

2. Connect the RJ-11 plug from the LCL-11A to the RJ-11 female socket in the customer's LCD-type keypad.

---

### **IMPORTANT!**

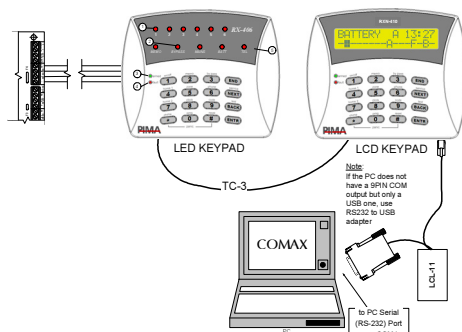
**LCL-11A can connect only to an LCD keypad. If the customer uses LED keypad, it must first be connected to LCD keypad and then to the PC. Use TC-3 cable to connect between the keypads (see next drawing).**

---



---

<sup>10</sup> An adaptor (not included with the modem) might be needed to connect the phone cable to the wall jack

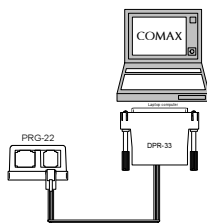


Connecting LED &amp; LCD keypads

### 9.3 Connecting DPR-33 & 44 Adapters

For Direct Programming of the Fast Programmer (PRG-22/896), connect DPR-33 to the PC's parallel port and to the device that needs programming. DPR-44 is used to program transmitters (VHF/UHF) and the SAT-8/9. Follow these steps to connect the DPR-33/44 and make it ready for programming with COMAX:

1. Connect the 25 pin D-type connector of the DPR-33/44 to the printer's parallel port on the computer



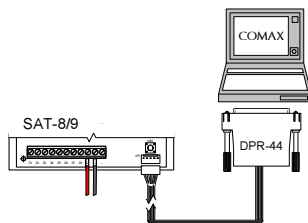
Connecting PRG 22/896 with DPR-33

---

**Note:** Check for the number of this port (i.e., LPT1, LPT2, etc.).

---

2. Connect the RJ-11 plug to the DPR-44 and the other end to the device that needs programming.



Connecting SAT-8/9 with DPR-44

## 9.4 Device Information Screen

This screen is displayed whenever connecting to a device or a new device is connected. The screen includes all the data of the selected device (see each device for a detailed description).

### IMPORTANT!

**No programming and configuration tasks can take place unless this screen is displayed.**

## 9.5 Parameter Description Text

This text includes some additional help information about the parameter that is being modified. Not all parameters have this text.

## 10 The COMAX Log

The COMAX log is a text file located in the COMAX default folder. It contains information about log-in & out to the COMAX and about uploading & downloading actions. By default the file is located here: C:/Program Files/Comax/comax.log. To open the file, double-click on it.

## 11 Programming Control Panels

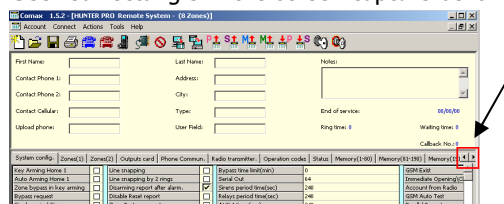
### 11.1 General

The parameters programmed in COMAX match those in the control panels. They are divided into groups, with each group having its own screen. The groups are selected by clicking the configuration tabs.

### IMPORTANT!

**The device configuration screen includes all the parameters of the updated version of the device. Therefore, for example, if the number of users was increased to 10 with the last version, the corresponding parameter screen shall display 10 User Codes even if the connected device is of previous version and has less User Codes to program.**


The optimize screen resolution is 1024\*768. When working with a low-resolution monitor, the display area might be too small to include all the tabs. In such a case, the tabs can be scrolled, left or right, by clicking the arrows displayed on the right side of the tab row. See red rectangle in the screen capture below.



### Scrolling Parameters tabs

All PIMA's control panels can be programmed and monitored, either remotely or locally. The following paragraphs shall describe the 2 methods and their differences.

## 11.2 Standard Remote Communication

1. Connect the MODEM (see page 19)
2. Open or create an account matching the connected control panel type.
3. Click the blue Dial icon .
4. Verify that the phone number to dial is correct
5. Click OK. The Status Bar shall display the status of the communication process.
6. Wait until "Modem Connected..." message is displayed in the status bar.
7. The COMAX is connected to the control panel. you can now download and/or upload parameters to/from it.

## 11.3 Local Programming

1. Connect the LCL-11A to the LCD keypad of the Control Panel (see page 20)
2. Open or create an account matching the connected control panel type. Look in the connected panel's installer guide for specific programming instructions. For example, in HUNTER-PRO 896 the clicking sequence is:

**Technician code → #8 (Full Programming) → Enter → Next (Local Download) → Enter**

**Immediately** click  or 'Ctrl'+L.

---

**IMPORTANT! The timeout for clicking the connect button since pushing the enter key is 10 seconds. If you fail to do so within the 10 seconds, the process needs to restart.**

---

3. Wait until the **Connected** is displayed on the Status Bar
4. The COMAX is connected to the control panel. You can now download and/or upload parameters to/from it.

## 11.4 Line Snapping


Dialing with line snapping is used where the customer's control panel is sharing the line with an answering machine.

---

### **IMPORTANT!**

**The control panel MUST be configured to support the Line Snapping feature for remote communication.**

---

1. Connect the MODEM (see page 19)
2. Open or create an account matching the connected control panel type
3. Click the red Dial icon .
4. Verify that the phone number to dial is correct
5. Click OK. the Status Bar shall display the status of the communication process

6. Wait until the Modem Connected message is displayed in the status bar
7. The COMAX is connected to the control panel. you can now download and/or upload parameters to/from it

## 11.5 Remote Communication with Two Rings Line Snapping


Dialing with two rings line snapping is used where the customer's phone line has voice mail and thus the call is rerouted to the voice mail before the control panel (or any other device) can pick-up the line.

1. Connect the MODEM (see page 19)
2. Open or create an account matching the connected control panel type
3. Enter in the **Ring time** and **Waiting time** fields the recommended value: **10**

---

**Note:** If Line Snapping fails, gradually increase ring time and waiting time values up to 15.

---

4. Click the blue Dial icon 
5. Verify that the phone number to dial is correct
6. Click OK. The Status Bar shall display the status of the communication process
7. Wait until the Modem Connected message is displayed on the status bar
8. The COMAX is connected to the control panel. You can now download and/or upload parameters to/from it

## 11.6 Call-Back Remote Communication


Dialing with callback is used where the customer requires a secure remote programming method. This feature is also useful in cutting phone expenses.

### IMPORTANT!

**The callback number can be programmed via the COMAX when the control panel is connected either locally or remotely, or when using PRG-22/896 (Fast Programmer).**

**Callback numbers In HUNTER-PRO 896 can be set via the User Menu.**

---

1. Connect the MODEM (see page 19)
2. In the Settings window, verify that the parameter 'S0' in the modem initialization string is set to 2 (i.e., **S0=2**)
3. If necessary, change the callback priority number in Callback No. field on main screen (appears on the bottom right of the screen's upper half). Callback numbers are set in phone communication tab and prioritized 1 to 4.
4. Open or create an account matching the connected control panel type
5. Click the blue Dial icon 
6. Verify that the phone number to dial is correct
7. Click OK. the Status Bar shall display the status of the communication process
8. After the remote panel answers, a Callback Verification message is displayed.
9. Click OK

**IMPORTANT!**

**Until OK is clicked, the COMAX will not accept any incoming calls.**

10. Wait for the control panel to dial back. The status bar shall display the status of the communication process

**IMPORTANT!**

**When using the callback and the line snapping features together, please follow the instructions in the known issues section (page 30)**

## 12 Uploading & Downloading Parameters

### 12.1 Downloading Parameters to the Control Panel

**IMPORTANT!**

- Be advised to upload parameters before programming.
- Before downloading make sure you have filled all the parameters' fields.
- Parameters can be downloaded only if alarm system is disarmed.

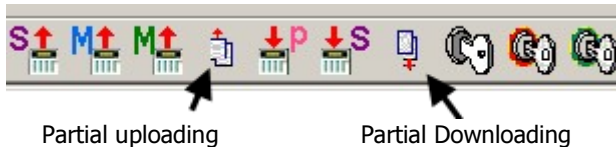
1. Click the Download Parameters icon  in the COMAX toolbar
2. A window showing the download process is displayed. Wait until it finishes.

### 12.2 Uploading Parameters to COMAX

1. Click the Upload Parameters icon 
2. A window showing the upload process is displayed. Wait until it finishes
3. Save Customer's record if necessary.

### 12.3 Partial Downloading of Parameters


Starting with HUNTER-PRO 896, downloading and uploading parameters can be done by choosing parameters instead of uploading or downloading them all. In accordance, two new icons have been added to the COMAX toolbar:




1. Select the requested parameter by holding 'Ctrl' key and mouse clicking the parameter field. The field will turn green. To select a table, click on its header. To select a whole page, click on its tab. To deselect any field/table/page repeat the process.

System	Zones (1)	Zones (2)	Communication	Phone Communication
Outputs	Output Type			Polarity   Active in Dis
External Siren	External Siren			<input type="checkbox"/>   <input checked="" type="checkbox"/>
Internal Siren	Internal Siren			<input type="checkbox"/>   <input checked="" type="checkbox"/>
Relay	Door Code			<input type="checkbox"/>   <input checked="" type="checkbox"/>
Smoke	Smoke Det., Power			<input type="checkbox"/>   <input checked="" type="checkbox"/>
On/Off	Armed			<input type="checkbox"/>   <input checked="" type="checkbox"/>
Alarm	Alarm- all types			<input type="checkbox"/>   <input checked="" type="checkbox"/>
Audio Control	Audio Control			<input checked="" type="checkbox"/>   <input checked="" type="checkbox"/>
OUT-1000	Output Type			Polarity   Active in Disa.
OUT-1000 1	Fire			<input type="checkbox"/>   <input checked="" type="checkbox"/>

Selecting a field

2. Click the partial downloading icon .

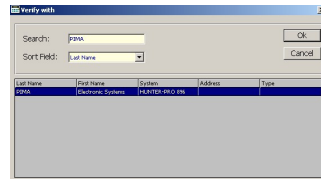
## 12.4 Partial Uploading of Parameters

Repeat the partial downloading process but click the uploading icon .

## 13 Verifying Parameters with the Database

It is sometimes required to verify the parameters stored in the customer's file with the current system parameters. For this purpose you will need to upload the current parameters from the system and verify them:

1. First, upload parameters (as described in the previous section) from the system.
2. Then, Click **Accounts** → **Verify** (screen to file) or Click 'Ctrl' + F.
3. Choose an account and click **OK**. Comax checks the status you've just uploaded with the one in the account file (i.e. the one saved last upload).
4. If all parameters match, a "Files Match" message in red will be displayed in the status & help bar.
5. Mismatched fields (if there are any) will be colored in red.



Verify with Screen

System	Zones (1)	Zones (2)	Communication	Phone Communication 2
Service Provider Name	ALARMS			Keypad/Pi
End of Service Date	06/08			Keypad 1
Local Expander		<input checked="" type="checkbox"/>		Keypad 2
Not Used		<input type="checkbox"/>		Keypad 3
I/O-W Expander		<input type="checkbox"/>		Keypad 4
Not Used		<input type="checkbox"/>		Keypad 5
W/L Supervisor Time (hrs)	0			Keypad 6
W/L Supervisor Time (min)	0			Keypad 7
Number of Keypads	0			Keypad 8
Number of Expanders	0			
Number of Relay Expanders	0			

6. Place the cursor on a red field and the Status Bar will display the value as stored in the record
7. To end, click 'Ctrl' + F again.

## 14 Programming Radio Transmitters

The radio transmitters are programmed directly via the DPR-44 (see page 21). The read & write procedure for all radio transmitters is the same:

Write to the transmitter: click the direct programming icon  and select **Program 1** OR select **Actions** → **Direct Write** → **Program 1**.

Read from the transmitter: click the Direct Read icon  and select **program 1** OR select **Actions** → **Direct Read** → **Program 1**.



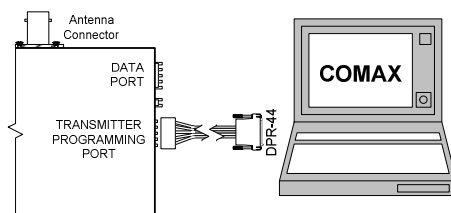
Write/Read Commands

### 14.1 TRV-100 & TRU-100

Programming PIMA's long-range radio transmitters involves two parameters: The two frequencies the transmitters support.

**Note:** The frequencies must be within the allowed range. If not, a fault message will be displayed

Connect the transmitter to the DPR-44 using a dedicated cable (P/N 3411029). See next figure.



Connecting TRV-100 & TRU-100 Transmitters

#### IMPORTANT!

- **When reading the transmitter's frequencies, a transmitter record must be opened on screen. If not opened, an error message will be displayed.**
- **If the protection code is different from the transmitter code, only downloading parameters is enabled.**

## 14.2 SAT-8

The parameters of the SAT-8 stand-alone events encoder alarm unit are also programmed directly via the DPR-44.

### IMPORTANT!

**When reading the SAT-8 parameters, a SAT-8 record must be opened on screen. If not opened, an error message shall be displayed**

## 14.3 SAT-9

The parameters of the PIMA's SAT-9 PSTN to radio adaptor are also programmed directly via the DPR-44.

### IMPORTANT!

**When reading the SAT-9 parameters, a SAT-9 record must be opened on screen. If not opened, an error message shall be displayed**


# 15 Programming Accessories

## 15.1 PRG-22 & PRG-896 Fast Programmers


PRG-22 & PRG-896 can store programs for different PIMA Control Panels: PRG-896 supports HUNTER-PRO 896 only; PRG-22 supports all other systems. The number of programs that can be stored varies according to the type of the PRG and the type of control panel. The systems and the number of their programs are: Captain – 4, Hunter-Pro – 2, Hunter-Pro 32 – 1, Hunter-Pro 896 – 7.

PRG-22/896 are programmed directly via the DPR-33 adapter. Since they store control panels programs, they are not shown on the device list when creating a new record (i.e., to load the PRG-22/896 with CAPTAIN programs, select CAPTAIN from the device list when creating a new record).

### 15.1.1 Writing Data to the PRG-22/896

Click  and select the number<sup>11</sup> of program to write OR **Actions** → **Direct Write** → **Program 1** (see figure in page 27).

### 15.1.2 Reading Data from the PRG-22/896

The programs stored on the PRG-22/896 can also be read and modified. To read the data click  and select the number of program to read OR **Actions** → **Direct Read** → **Program 1** (see figure in page 27).

---

11 The number of programs that can be stored in the PRG-22 varies according to the type of control panel (e.g., CAPTAIN can have up to four programs where HUNTER-PRO can have only two). See the HUNTER-PRO 896 Installation Guide for details regarding the PRG-896 programs.

---


**IMPORTANT!**

**When reading a program, the corresponding control panel record must be opened. If not opened, an error message will be displayed or data misconfiguration might occur.**

---

## 15.2 GSM-200 Cellular Receiver

The COMAX programs a single parameter in the GSM-200: the encryption key. The receiver connects through a designated cable (PIMA P/N 3411078)

- 1 Click  or **File** → **Open** and choose GSM-200.
- 2 Enter the 64 characters Hex. encryption key.
- 3 Download the key to the receiver.

---

**IMPORTANT!**


**The encryption key cannot be reproduced in any way. Keep a copy of it in a safe place.**

---

## 15.3 Net4Pro Card

COMAX has 6 parameters to program in the Net4Pro:

- Unit IP
- Gateway IP
- Net mask
- Remote IP – the MS server IP.
- Remote port - the MS server port.
- Encryption key

- 1 Click  or **File** → **Open** and choose Net4Pro
- 2 Enter the desired parameters.
- 3 Download to the card.

## 16 Glossary

**Download Code:** A security code that is saved in the panel every time data is downloaded with the COMAX and the PRGs.

**DPR-33/DPR-44:** A direct programming adapter used to directly program E<sup>2</sup>PROM device. The DPR-33/DPR-44 is connected to the PC printer port (i.e., LPT1, LPTM2, etc.) and to the programmed device via a special cable:

- DPR-33: Used with RJ-11 4/4 to RJ-11 4/6 and for programming the PRG-22/896 (Fast Programmer).
- DPR-44: Used with RJ-11 4/6 to Molex cable and for programming transmitters/ SAT-8/SAT-9.

**LCL-11A:** A programming adapter used to locally connect and program a customer's control panel. The LCL-11A is connected to the PC serial port (i.e., COM1, COM2, etc.) and to the control panel via an LCD-type keypad (version 10 and up).

When a customer does not have an LCD-type keypad or when his LCD-type keypad is of older version (before 10), a TC-3 Technician Cable can be used, connected to any of PIMA's LCD keypads or panels.

**PRG-22/896:** fast programmers that can store programs for different PIMA Control Panels. The number of programs that can be stored varies according to the type of the programmed control panel (e.g., CAPTAIN can have up to four programs where HUNTER-PRO can have only two).

**Supervisor Code:** The Supervisor code is used to enter the configuration screen, manage users and modify Upload & Download Codes.

### **IMPORTANT!**


**No user can have the same password as the supervisor**

**Upload Code:** The COMAX Upload Code is compared with the code stored in the customer's control panel when attempting to connect to it. Only if the Upload Code and the control panel stored code are identical, the COMAX can connect and program/read parameters. This is done to prevent unauthorized personal to connect and tamper with the control panel parameters.

**TC-3:** PIMA's technician cable connects between PIMA's control panels to any of PIMA's LCD keypads. The TC-3 has three adaptors (RJ-11, Terminal Connection, and Molex) that fit any of PIMA's control panels and keypads



**Using the Upload and Download Codes:** Normally the Upload and Download codes should be identical. In the case where a customer control panel's code needs to be changed, the *Upload Code* should be the customer's old code and the *Download Code* should be the new one.

## **17 Known Issues**

- A. When using with the PIMA control panels the Callback together with the Dial & Snapping features, the following should be done for a successful operation of the feature:
1. In the Settings window, verify that the Initialization String is:  
**T&D1SØ=2S7=6ØS1Ø=255S9=1&KØ**
  2. Open or create a customer record matching the connected control panel type
  3. Click the red dial icon 
  4. Verify that the phone number to dial is correct (modify when necessary)
  5. Click OK. the status bar shall display the status of the communication process
  6. After the remote control panel answers, a Callback Verification message is displayed.
  7. Click OK

### **IMPORTANT!**

**Until OK is clicked, the COMAX will not accept any incoming calls.**

8. Click the blue Dial icon 
9. Click OK
10. Wait 2-3 seconds and click the Disconnect icon 
11. Wait for the panel to call back.

B. Code errors:

When entering a wrong download or upload code one of two messages can appear:

1. "Wrong handshake code"
  2. "Connection time out".
- Enter the correct code and proceed.

C. Uninstalling COMAX

1. In the Windows Control Panel, click on **Add or Remove Programs**
2. Locate the **COMAX** in the installed programs list
3. Click the **Remove** button
4. Follow the onscreen instructions
5. Delete the comax folder

