FOR BETTER PROTECTION

HUNTER-PRO 32

Intruder Alarm System

Installation Guide

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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.

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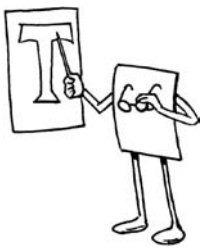

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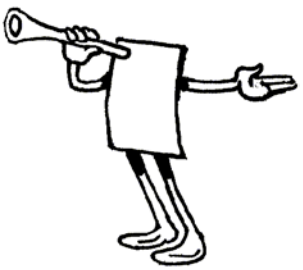

Chapter 1 Introduction

HUNTER-PRO 32 Intruder Alarm System contains numerous features that allow it to befit the customer's individual needs, and yet remain easy to program and use both by the customer and the technician.

The HUNTER-PRO 32 is secured against radio-frequency (RF) interference and electro-magnetic disturbances (EMI). In this guide you will find installation instructions, description of programming possibilities and further information that shall help you install and operate the system.

IMPORTANT!

For every-day operation uses, please see HUNTER-PRO 32 User Guide booklet, which is an integral part of the Installer Guide. Furthermore, the User Guide includes user's programming parameters instructions, which is crucial for operating the system.

For any further questions, please do not hesitate to contact your local **PIMA** distributor or **PIMA** directly at:

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Up to date literature is available to download from our website:

www.pima-alarms.com

1.1 Main Features HUNTER-PRO 32

- 8 to 32 zones with wireless add-on, local, and remote bus expanders
- Supports a wide range of partition options:
- Up to 16 partitions each with it own Account ID and Users
- Up to 8 subsystems each with different keypads, IDs, etc.
- Full supervision data of wireless detectors (supervision, low battery, tamper)
- Comprehensive Zone Tests for flawless installation: Walk Test, Soak Test, etc.
- Two options for viewing system status:
- Detailed: Scrolling events, zones' and system's status
- "PIMA" Style: Status of all 32 zones is displayed simultaneously
- Four Subscriber dialing numbers with optional voice message
- Four Monitoring Stations phone numbers
- PIMA unique Integrated Digital Communicator (telephone, long-range radio)
- Supports split and double reporting to two monitoring stations with different account IDs
- LCD keypad with multilingual Menu-Driven screens for easy programming and operation
- Many alternatives for easy programming (Keypad, Fast Programmer, Local/Remote download software)
- Up to 24 users with various authorization levels
- Various accessories (mic, voice unit etc.)
- Memory Log up to 410 events
- Automatic Arming at a preset time and/or after a preset silence time
- System remote control via any touchtone telephone

1.2 Safety Precautions

Your HUNTER-PRO 32 alarm system has been registered with the CE in accordance with EN 60950 of its rules. The CE requires us to tell you the following information:

- ✦ To reduce the risk of fire or electric shock, do not expose this alarm system to rain or moisture.
- ✦ Do not open the door of the alarm system. Dangerous high voltages are present inside of the enclosure. Refer servicing to qualified personnel only.
- ✦ This alarm system should be used with AC 230V, 50Hz. To prevent electric shocks and fire hazards, do NOT use any other power source.
- ✦ Do not spill liquid of any kind onto the unit. If liquid is accidentally spilled onto the unit, immediately consult a qualified service.
- ✦ Install this product in a protected location where no one can trip over any line or power cored. Protect cords from damage or abrasion.
- ✦ Disconnect all sources of power supply before proceeding with the installation.
- ✦ Connect the AC wires to the terminal block on the PCB as marking. Pay attention to polarity.

1.3 Signs and Abbreviations Key

Key press

Press and hold key, until confirmation beep is heard

Save data

Press this key at any programming stage in order to return to root screen

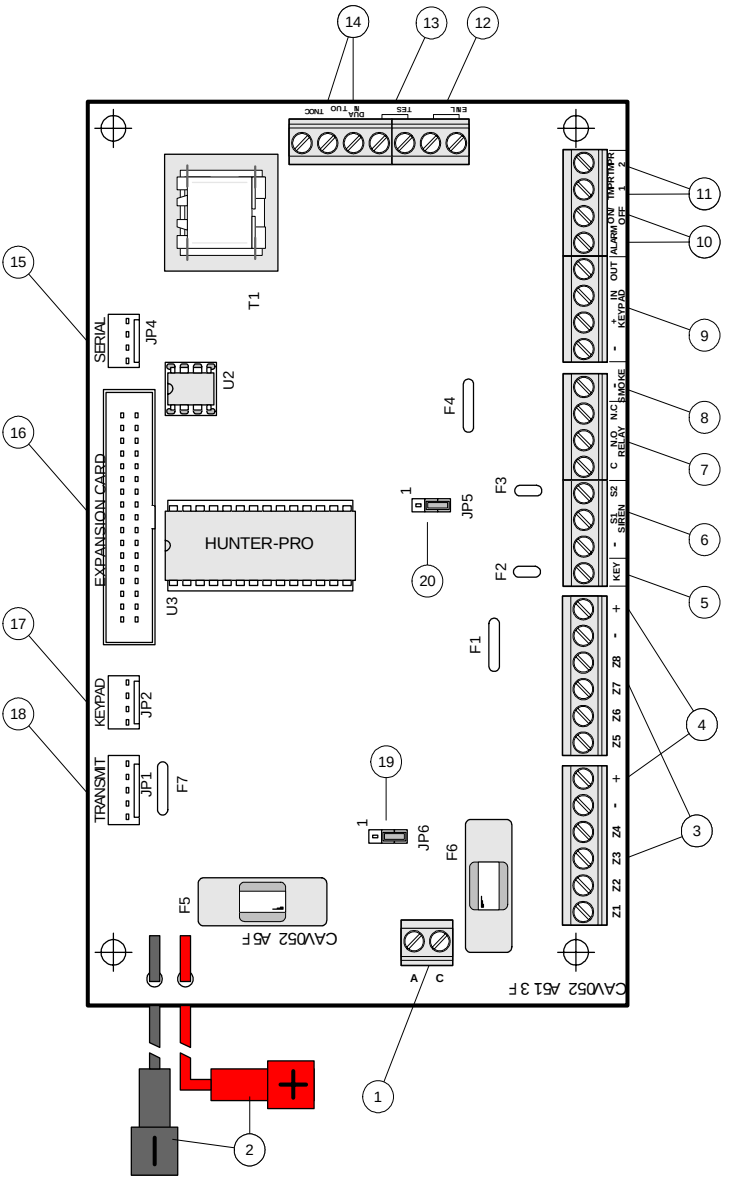
Default Master Code: 5555

"Enabled User Code": A code enabled by technician to enter the user menu

"LCD Zone Numbers": Referring to the frame of zones engraved above and below the LCD display window, indicating the zones' numbers.

CMS: Central Monitoring Station

1.4 The Control-Panel



1.4.1 Control Panel Fuses

Regular Fuses (2)

F5 (5 Amp) - protects the battery from a short on the PCB.

F6 (5 Amp) - protects the AC from a short on the PCB.

Thermal Fuses for limiting current (5)

F1 – Detector power supply (750mA)

F2, F3 – Siren1 and Siren2 (1.1A)

F4 – Keypad power supply (750mA)

F7 – Protection for long-range radio transmitter

1.4.2 The Control Panel's Connections & Terminals

① AC – Voltage Input

14VAC input supplied by the transformer.

② Connections to Backup Battery

Two wires connect the backup battery to the PCB. The red wire connects to the positive (+) contact of the battery and the black wire connects to the negative (–) contact of the battery.

IMPORTANT!

Ensure correct connection of battery polarity! Switching the polarity can damage the PCB.

③ Z1–Z8 – Zone Inputs

Zone inputs can be connected to all types of detectors with dry contact outputs. All zones can be connected with single or double EOL resistors

NOTE:

The number of zones can be doubled by connecting line/wireless expenders (refer to section 3.2 for expending options in HUNTER-PRO 32.

④ (+) – Power Supply for Detectors

Power supply for detectors that require DC operating voltage, such as infrared detectors, beam-detectors etc.

⑤ KEY – Key or remote Arming Input

Use momentary or ON/OFF key to arm/disarm the system.

⑥ S1, S2 – Siren 1 and Siren 2 Outputs

Two siren outputs connected to the same on-board sound generator (driver). Connect the second siren connection is to a ground (-) connection. Each siren has a dedicated automatic thermal fuse F2 and F3 (see section 3.6)

⑦ RELAY – Internal Relay Connections

Three connections to a relay mounted on the PCB. Can be used to activate various auxiliary accessories such as external lighting, CCTV, external communicator, electric locks, etc .

The three outputs are C (common), NO (normally open) and NC (normally closed).

⑧ SMOKE – Switched Ground

Switched GND for smoke detectors that require reset. Any zone can be programmed to be a "smoke detector" input; its activation will cause the GND to disconnect for approximately one minute.

Manual reset is done by pressing and holding the 

key.

⑨ KEYPAD – Connection to keypads

There are four Keypad terminals: Voltage power supply (–) and (+) .OUT is for data from the control panel to the keypad, and IN is for data from the keypad to the control panel. An automatic thermal fuse F4 protects the 13.8 VDC power supply. Up to 8 RXN 400/410 keypads can be connected simultaneously.

⑩ ALRM and ON/OFF – Auxiliary Outputs

These terminals have two conditions: disconnect or short to ground. These outputs serve as indicators to auxiliary units as to system status and alarm status (see section 5.8).

⑪ TMPR1 and TMPR2 – Tamper Inputs

Inputs for tamper switches from detectors and boxes that can be connected with/without EOL resistor/s. Different responses can be programmed to arm/disarm system status. These inputs can serve as indicators other than tamper, for example: thermostat, 24 hours zone monitoring, panic button etc (see section 3.5).

⑫ LINE – Connection to Telephone Line

A telephone line connection for dialing private numbers and to Monitoring Stations, and for remote programming. For best results connect as close as possible to the line source to provide best protection against tampering.

⑬ SET – Connection to telephone set

Connection to a telephone set or answering machine. Do not connect a fax machine or modem if you enable "line snapping" or "2 rings snapping".

⑭ AUD IN, AUD OUT, CONT – Connections to Mic. and Voice modules

CONT activates voice and microphone modules VU-20 and MIC-100. Connect AUD IN to the audio outputs from the microphone and voice modules. AUD OUT is yet to be determined (refer to section 3.14 and 3.15).

NOTE:

The VU-20 and MIC-100 cannot be connected simultaneously.

⑮ JP4 SERIAL- Serial Input

JP4 connects to a wireless detector receiver RC-PRO and home control system. For further information, refer to section 3.3.4.

⑯JP3 – Connection to Expansion Cards

Connection to Output Expansion Cards OUT-1000 and EXP-PRO (refer to section. 3.2 and 3.9).

⑰ JP2 KEYPAD – Connection to Technician Keypad

Connection to Technician Keypad (using the Technician Cable TC-3).

⑱ TRANSMIT – Connection to Long-Range Radio Transmitter

Connection to PIMA long-range radio transmitters TRU/TRV-100.

NOTE:

It is possible to connect long-range transmitters other than PIMA's by connecting the TX-1000 adaptor.

⑲ JP5-Select Siren Type

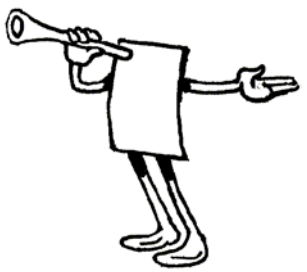
Connection to two types of sirens: with internal oscillator/driver (speakers) and without internal oscillator/driver (horn). In the first case, short pins 1 and 2, in the second case, short pins 2 and 3.

NOTE:

DC is useful only when connecting the Siren.

⑳ JP6-Select Siren Power Source

Connection to siren power source (for external power source, short pins 1 and 2; for using the Battery as the power source, short pins 2 and 3.)



CHAPTER 2
PARTITIONS

2.1 General

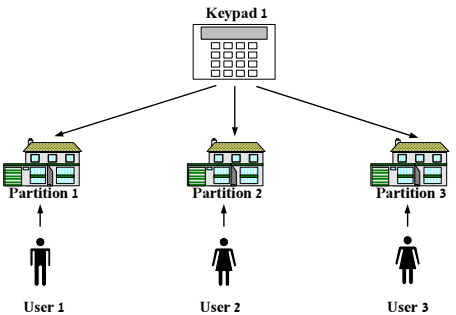
HUNTER-PRO 32 can consist up to 16 partitions that are controlled by different user codes, different keypads, or, on the other hand, share the same keypads.

This chapter scans the different partitioning options in HUNTER-PRO 32.

1. The system can be divided into 16 partitions that are controlled individually by a different user code, or share the same user code (refer to HUNTER-PRO 32 User Manual for programming this feature).
   Up to 8 keypads can be installed and it/they will display the whole 16 partitions as a single system (see example A in the next page).
2. The system can be divided up to 8 sub-systems with 8 different keypads (max), when each sub-system is controlled by a different keypad or shares the same keypad (see example B and C in the following pages).

2.2 Examples

2.2.1 Example A



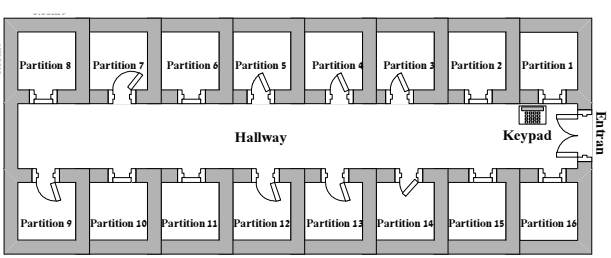
Drawing 1-Using partitions (example A)

In example A:
Keypad 1 controllers 3 partitions
User 1 can only activate partition 1
User 2 can only activate partition 2
User 3 can only activate partition 3

NOTE:

The system can be divided up to 16 partitions (max) with 8 keypads (max), when all the keypads are identical in terms of controlling all the partitions and displaying their status.

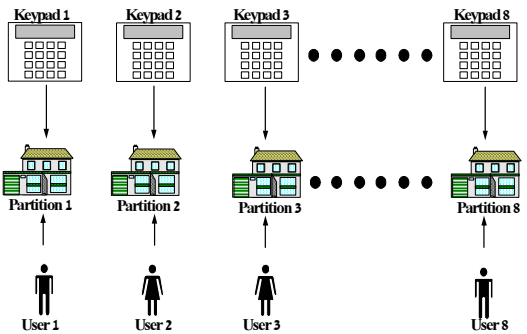
Classical Application for Example A



In an office building, there is a floor with 16 offices. A keypad is installed at the entrance of the offices' hallway, and each of the offices has a different user

code for arming/disarming the system. In this case, the keypad will display the entire system's status.
A detector that is allocated to several partitions can be installed in order to protect the entrance of the offices' hallway (i.e. a zone shared by several/all partitions). Allocating the entrance zone to all partitions will protect the entrance, providing all partitions are armed. This zone will be inactive with the first user that disarms his partition.

2.2.2 Example B



Drawing 2-Using partitions (example B)

In example B:

Each partition has it own individual user code and keypad (e.g. user 1 can activate partition1 but not partition 2).

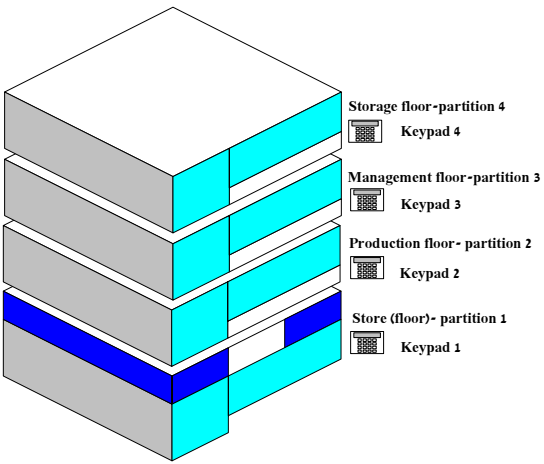
A user can only arm/disarm his partition only by using his allocated keypad (e.g user 1 can only arm/disarm his partition using keypad 1).

Each keypad presents only its allocated partition's status (meaning, keypad 1 displays only partition 1 status, keypad 2 displays only partition 2 status, and so on).

NOTE:

The keypad displays only its allocated partition's status, including arming/disarming the partition, opened zones allocated to this partition, and zones that triggered the alarm.

Classical Application for Example B



A company building is divided into 4 departments that have different entrances and different working hours:

Each of the departments has its own individual keypad. Accordingly:

Keypad 1 is allocated to partition 1 (store floor)

Keypad 2 is allocated to partition 2 (production floor)

Keypad 3 is allocated to partition 3 (management floor)

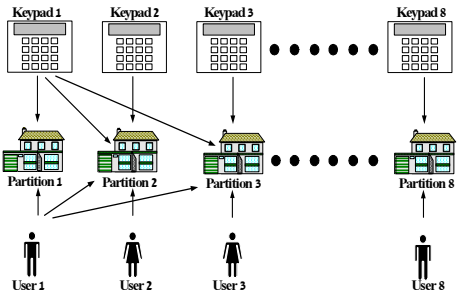
Keypad 4 is allocated to partition 4 (storage floor)

In addition, partition 1 can be controlled by a single user code or several user codes (vital for foreman and storage workers, for example).

NOTE:

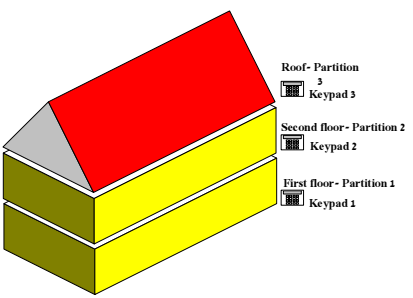
You can also limit disarming hours and other authorizations for each user.

2.2.3 Example C



Drawing 3- Using sub-systems (example C)

Classical Application for Example C

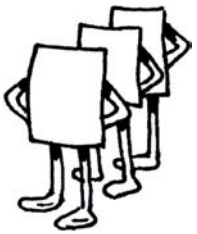


In a private home there are 3 floors: the first floor is partition 1, the second floor is partition 2, and the third floor is partition 3. User and keypad allocation:

Keypad 1 controls partition 1,2,3 (displays all partitions' status)
Keypad 2 only controls partition 2 (displays only partition 2 status)
Keypad 3 only controls partition 3 (displays only partition 3 status)
User 1 can activate partitions 1,2,3 using keypad 1
User 2 can activate partition 2 from keypad 1,2
User 3 can activate partition 3 from keypad 1,3

NOTE:

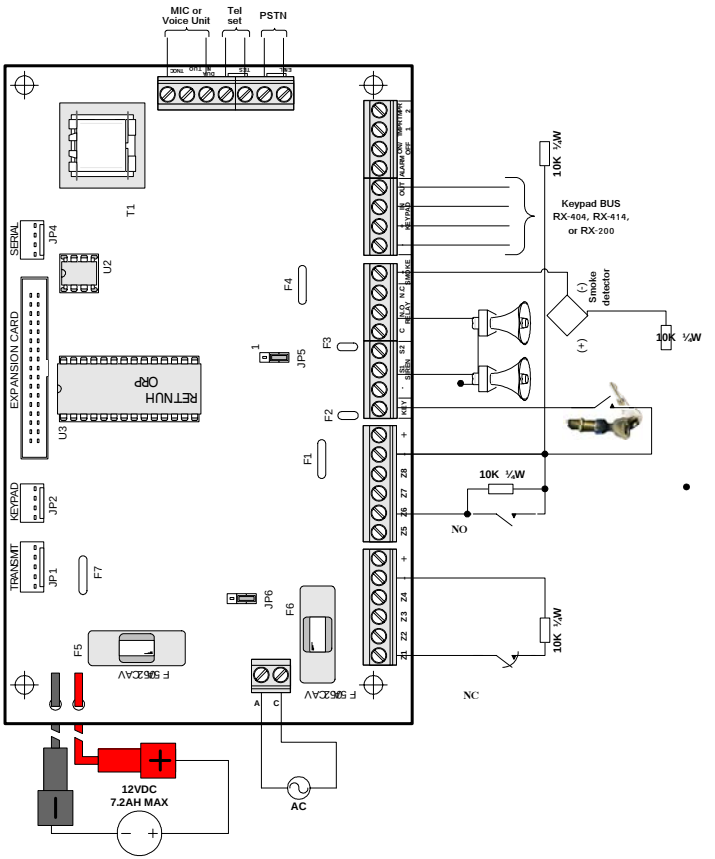
It is possible for a user to control several partitions using a single code.



Chapter 3
Installing Peripherals

3.1 General

Connect the various accessories according to the following diagram and instructions:



3.2 Connecting Zones

IMPORTANT!

Always disconnect battery and mains power supply when you connect and disconnect wires.

3.2.1 Zone Inputs

You can connect each zone input with 0/1/2 EOL resistors. Define each zone in the "system configuration" accordingly. The number of resistors you connect

(one or two) is defined as a general rule for all the zones (refer to section. 5.3.1).

3.2.2 Connecting Detector without using EOL resistor

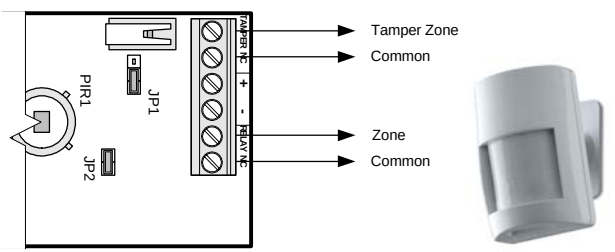
Connect a detector with NC output (for example, Defender-2K) without EOL resistor according to the below diagrams.

There are several options to connect the tamper outputs from the detectors: serial connection that can be connected to the tamper input in the control panel, or to a zone that is defined to as 88 "24 hours".

The Tamper can also be connected in serial to the relay output of the detector.

NOTE:

When connecting NO detector, make sure the zone input is configured NO as well (refer to section. 5.3.1).



3.2.3 Connecting Detector using <u>one</u> EOL resistor

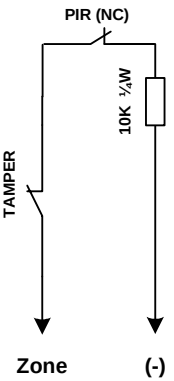
Connect an NC detector (for example, DEFENDER) with one EOL resistor according to the below diagrams.

The tamper can be connected to the control panel's tamper output, or a "24 hour" zone.

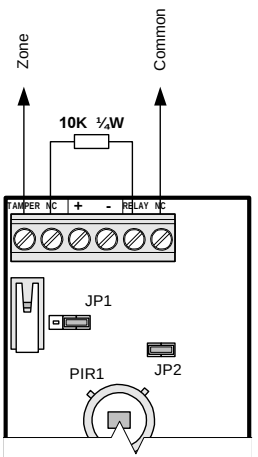
NOTE:

When connecting NO detector, make sure the zone input is configured NO as well (refer to section. 5.3.1). For tamper configuration: section 5.6).

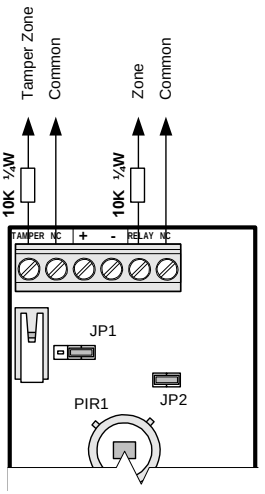
<u>Connecting EOL resistor to NC PIR Detector</u>



One EOL resistor connected to a NC detector

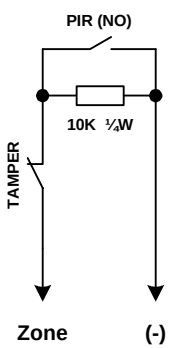


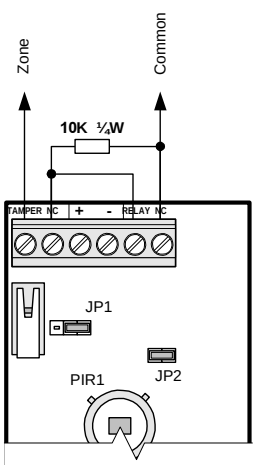
One EOL resistor in serial to the relay and the TAMPER

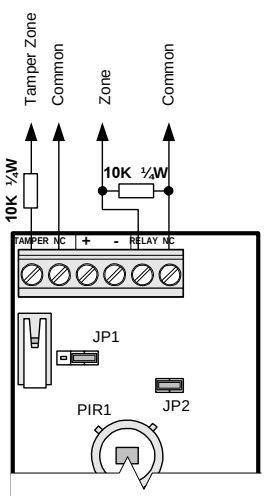


Separate connections for the relay and the TAMPER; each with a dedicated EOL resistor

Connecting EOL resistor to NO PIR Detector







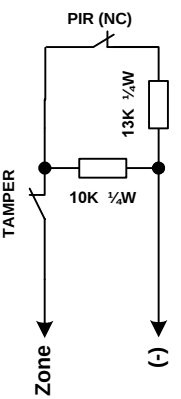
One EOL resistor connected to a NC detector	One EOL resistor in serial to the relay and the TAMPER	Separate connections for the relay and the TAMPER; each with a dedicated EOL resistor

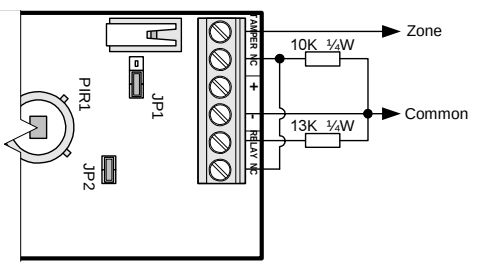
3.2.4 Connecting Detector using <u>two</u> EOL resistors

Connect a detector with NC output (for example, Defender-2K) with two EOL resistors according to the below diagrams.

If you use the NO output from the detector then the zone should be configured as such (for zone configuration, refer to sections 5.3.1; For tamper configurations, refer to section 5.6.)

<u>Two EOL resistors with a Normally Closed (NC) PIR</u>

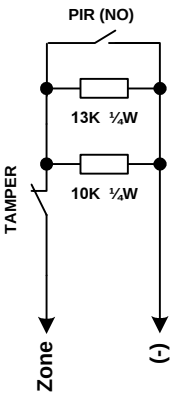




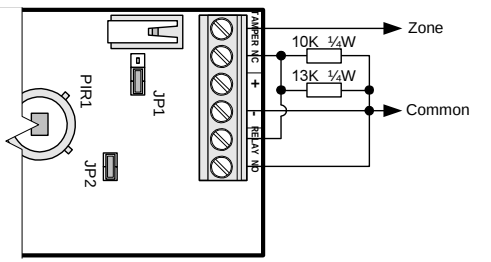
2 EOL resistors with a NC output

2 EOL resistors connected to a TAMPER in serial connection to a NC output

<u>Two EOL resistors with a Normally Open (NO) PIR</u>



2 EOL resistor with a NO output



2 EOL resistors connected to a TAMPER in serial connection to a NO output

3.3 Connecting Zone-Expenders (General)

It is possible to expand HUNTER-PRO 32's zones and outputs by using different expansion cards and Add-On devices.

The following is a brief scan of the zone and outputs expansion options. A detailed installation description is found later on (check the section reference at the end of each expansion option.)

Zone numeration in HUNTER-PRO 32 is dynamic. However, there is a set priority as to the zones' chronological order. See table 1.

IMPORTANT!

Remember HUNTER-PRO 32 supports up to 32 zones, even if the expansion cards have more than 32 zones.

Expansion Option	Zone number allocated by system					
Control Panel	1-8	1-8	1-8	1-8	1-8	1-8
EXP-LOCAL	9-16		(2)	(2)	(2)	(2)
I/O-8-External Expender 1	17-24	17-24	9-16	9-16	9-16	(2)
I/O-8-External Expender 2	25-32	25-32	17-24	17-24	(2)	(2)

I/O-8-External Expender 3	(1)	(1)	25-32	(2)	(2)	(2)
RC-PRO-Wireless Expansion	(1)	(1)	(1)	25-32 (3)	17-32	9-24

Table 1-Zone Numeration in HUNTER-PRO 32

(1) Cannot be installed in the system since quantity of zones exceeds 32

(2) Not installed in the system

(3) It is possible to use only 8 out of the receiver's 16 wireless zones

3.3.1 EXP-LOCAL: Local Expansion

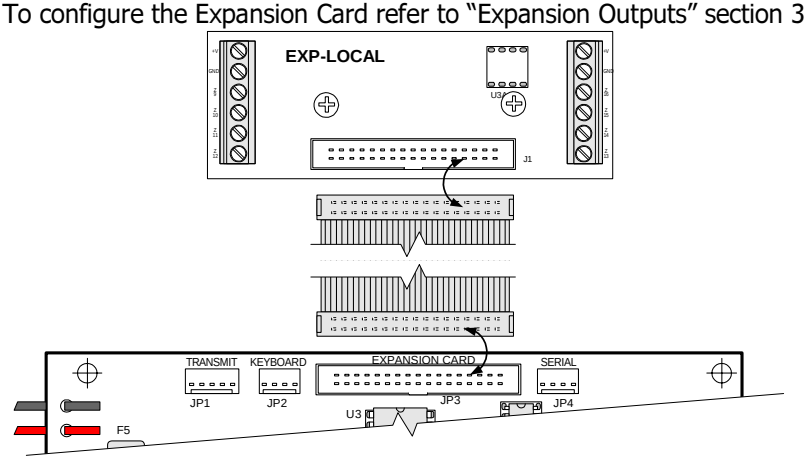
An 8-zone expansion card, used for connecting 8 additional wired zones. These zones are identical to those of the HUNTER-PRO 32, and shall always be programmed in the system as zones 9 to 16.

NOTE:

Disconnect all of the system's power sources before installing the expansion card.

To connect the EXP-LOCAL:

1. Use the two supplied screws to connect the card to the control panel's box
2. Use the supplied Flat Cable to connect between the card and JP3 (see Drawing 4).
3. To configure the Expansion Card refer to "Expansion Outputs" section 3.9.



Drawing 4 Connecting EXP-LOCAL to control panel

3.3.3 I/O-8: External Expenders

A zone and output expansion card connected to the keypad's communication lines (BUS). The card has 8 zones and one relay output. It is possible to install up to three I/O-8 cards (providing an EXP-LOCAL is not installed) in order to expend the system to 32 zones. Each card has an individual ID number configured by the jumpers on it (see Drawing 2 and the card itself to determine ID number).

	Card ID No.	1	2	3
Jumper position	JP4			
	JP3			
	JP2			
	JP1			

Table 2- Determining I/O-8 ID number

IMPORTANT!

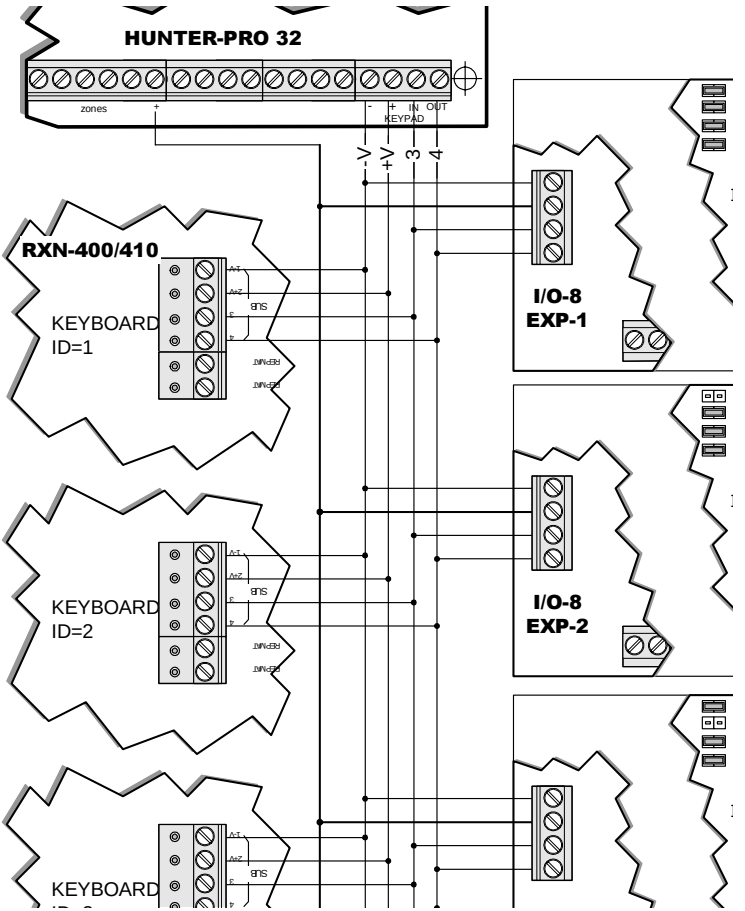
- Two cards cannot have the same ID number.
- The cards need be configured in a chronological order and without missing a number
- The card's ID number determines the number of zones connected to it (see table 1).

NOTE:

It is recommended to connect the +V to the expansion card, separately from the control panel.

To connect the I/O-8:

Follow the table below in order to connect the card/s to the control panel's bus



Drawing 5-Connecting external expansion cards on control panel's bus

In order to configure the number of I/O-8 cards connected to the system, see expender menus in section 5.2.2.2.

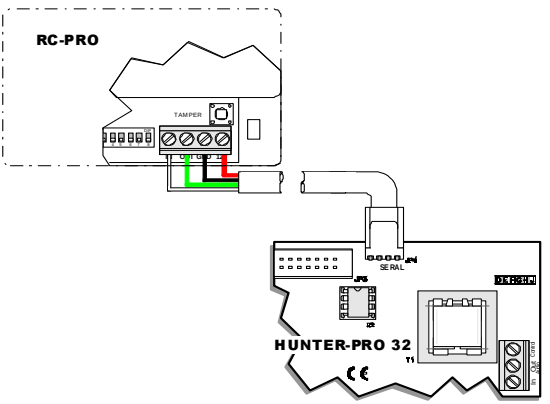
3.3.4 RC-PRO: Wireless Expansion

An integral wireless receiver that supports up to 16 zones and 18 remote controls (for arming/disarming/panic). Used for connecting wireless detectors (such as PIR, Reed Switch etc.), sensors, panic buttons and remote controls.

Along with the RC-PRO the HUNTER-PRO 32 becomes a Hybrid system that supports both wired and wireless detectors.

To connect the RC-PRO:

Use the Communication Cable to connect the control panel to the serial output. Follow Drawing 6 and Table 3).



Drawing 6-Connecting RC-PRO to control panel

Wire color	RC-PRO
Red	12V
Black	GND
Green	OUT
White	IN

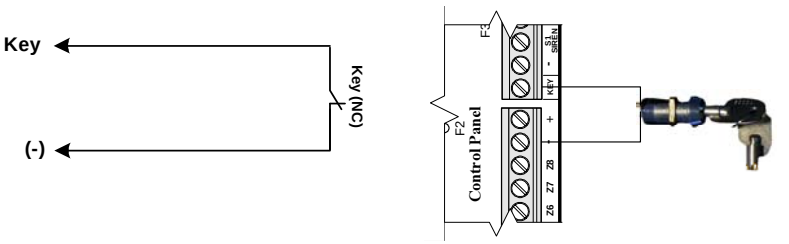
Table 3-Connecting RC-PRO

3.4 Connecting Key/Remote Control

Connect the key or remote control receiver according to the diagram below with a 10kW EOL resistor on the PCB terminal input. The key can be momentary or ON/OFF switches. The default is connection to momentary key.

NOTE:

- Make sure momentary key is programmed when connecting remote control.



Drawing 7-Connecting spring key to control panel

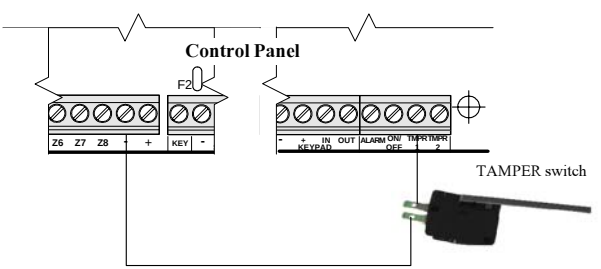
3.5 TMPR1 and TMPR2

These inputs are used to monitor the control panel box, detector housings and siren cases using tamper switches. This input can also be utilized for panic buttons, temperature sensors with dry contact outputs and more.

Connect the tamper switch to the input, TMPR1 or TMPR2 and the ground (–). A 10 kW EOL resistor at the terminal input on the PCB. The EOL provides a short/disconnect indication since the tamper switches are of the NO type.

NOTE:

Default programming is that both TAMPER inputs are enabled and without EOL. Refer to the "System Configuration" screen in order to change the defaults (section 5.6).



Drawing 8-Connecting tamper to control-panel

3.6 Connecting Sirens

Three siren types can be connected to HUNTER-PRO 32

IMPORTANT!

Different siren types cannot be connected simultaneously.

3.6.1 Siren without built-in oscillator: Horn (AC)

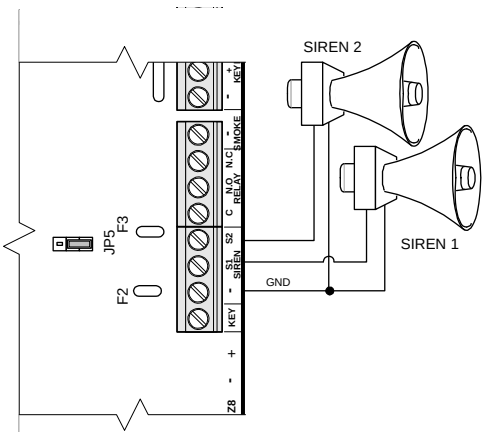
A Siren without a built-in oscillator (AC). Consumes up to 200 mA.

The siren is connected between terminal block outputs (S1, S2) and GND (-).

The siren's sounds are produced by HUNTER-PRO 32 inner built-in oscillator. When the zones' features are configured (see section 5.3.1), it is possible to program different siren sound to different zones.

Make sure that in "General Parameters" screen (section 5.6) the siren is not configured as DC (mark a "-" under the "D" letter parameter).

Also make sure that JP5 shorts legs 2 and 3 (see drawing 6).



Drawing 9 Connecting AC Siren

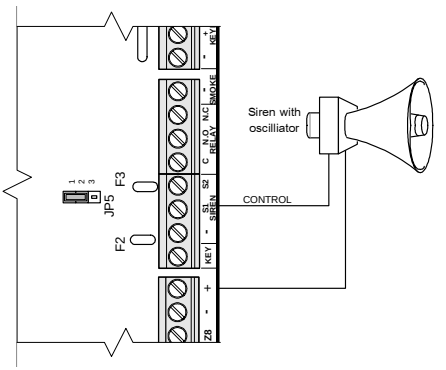
3.6.2 Stand-Alone Siren: Piazzo (DC)

A Siren with a built-in oscillator (DC). Consumes up to 200 mA.

The siren is connected between terminal block outputs (S1, S2) and Auxiliary Power (+).

Make sure that in "General Parameters" screen (section 5.6.1) the siren is configured as DC (mark a "+" under the "D" letter parameter).

Also make sure that JP5 shorts legs 1 and 2 (see drawing 7).



Drawing 10 Connecting DC Siren

3.6.3 High-Current Stand-Alone Siren

DC Siren with a high-current oscillator (consumes 3 Amp).

The siren is connected between terminal block outputs (S1, S2) and Auxiliary Power (+).

Make sure that JP5 shorts legs 2 and 3.

Make sure that JP6 shorts legs 1 and 2.

In "General Parameters" screen (section 5.6) the siren is configured as DC (mark a "+" under the "D" letter parameter).

3.7 Relay Outputs

The relay can be used for activating external devices (light, CCTV etc.) and there are several ways to activate it (zone is activated, pressing Relay Code on keypad, via telephone, and as response to faults/events).

Connect the relay outputs NO/NC/COM to activate the designated device.

To program Relay Code refer to "HUNTER-PRO 32 User Manual".

To program relay activation time see section 5.5.2 "Output Time"

NOTE:

If Relay Time is programmed as zero, the relay is constantly activated until Relay Code is entered or the system is switched OFF.

3.8 Auxiliary Outputs: ON/OFF (AUX1) ALARM (AUX2)

HUNTER-PRO 32 has two outputs for general use. In "General Parameter" screen (see section 5.6) the default is that AUX1 is designated for arming/disarming the system and AUX2 for the keypad's buzzer.

AUX1 switches (-) when activating system (ON/OFF output) *system default*

AUX2 switches (-) at time of alarm (ALARM output) *system default*

Also, these outputs can be allocated for further uses when the zone's responses are configured (see section 5.3.4).

IMPORTANT!

Configuring ON/OFF and/or ALARM in one of the zone responses cancels the configuration in General Parameters screen.

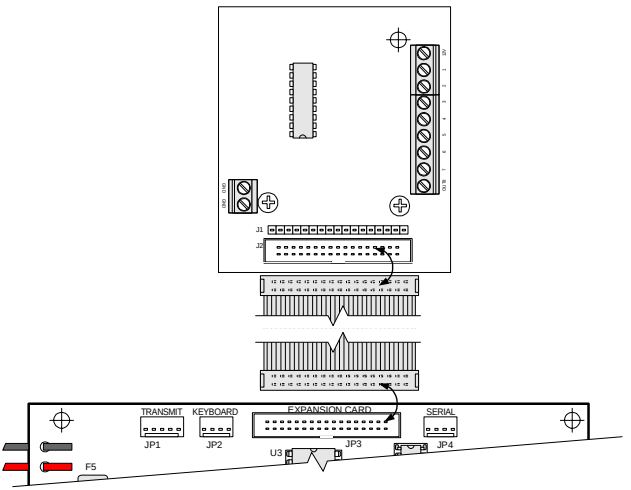
3.9 Expansion Outputs: OUT-1000

It is possible to add up to 8 outputs activated by an alarm for peripheral devices such as CCTV, alarm triggered lights, etc.

IMPORTANT!

Disconnect any of the system's power sources before installing the card

Follow the drawing 8 in order to connect the card to the control panel:



Drawing 11-Connecting OUT-1000 to control panel

Use the cable to connect the control panel's JP3 connector to OUT-1000's JP1 connector.

NOTE:

OUT-1000 can be connected simultaneously with EXP-LOCAL by connecting OUT-1000's JP2 to EXP-LOCAL's JP1 (see OUT-1000 Manual for instructions).

Configure the outputs' polarity

Configure which partition activates which output in "Output Configuration" screen (see section 5.8).

3.10 Connecting Keypads

Connect the keypad's "+" "-" "IN" "OUT" outputs to the compatible ones on control panel.

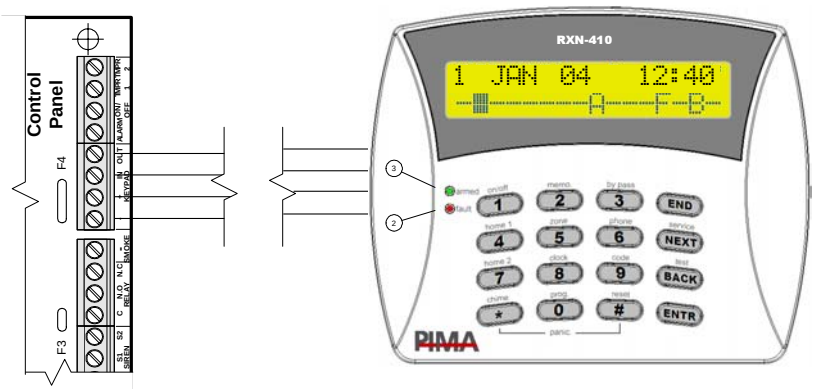
NOTE:

Up to 8 keypads can be connected to the system.

IMPORATNT!

- The 4 wires used to connect the keypad must be totally separate.
- The keypad's power source (-) / (+) cannot be used for detectors.

3.10.1 LCD Keypads: RXN-400/410

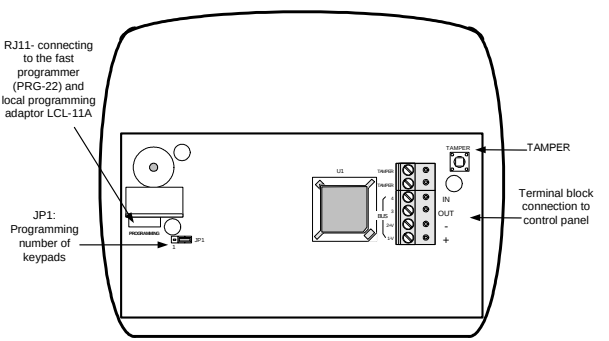


Drawing 12-Connecting LCD keypad to control panel

PIMA's new keypads contain a tamper switch that "supervises" the keypads connected to the system. In order to enable this feature:

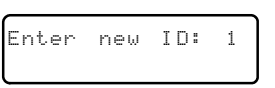
1. Configure exactly the number of keypads connected to the system:

   Short JP1 legs 1 and 2 on the keypad (see drawing 11).



Drawing 13-LCD keypad without back cover

   Then, in the following programming screen, enter desired number of keypads (1 to 8):



   To finish, short JP1 legs 2 and 3 (i.e. return the jumper).

2. Each of the keypads need be given a unique ID number.

Important!

If keypad supervision is not needed,

- The number of keypads connected to the system is not to be configured
- The keypads' ID need be set as zero (0).

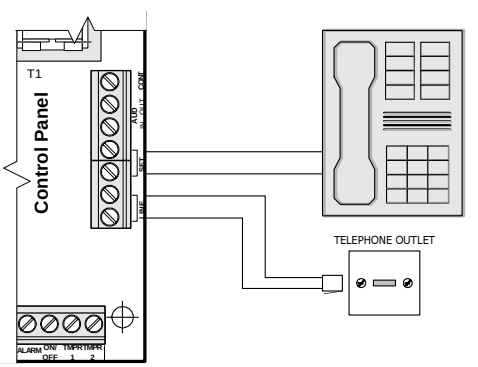
Note

Up to 8 keypads can be connected to the system, whether they have supervision or not.

3.12 Telephone Line and Devices

It is preferable that the PSTN line connects directly to the LINE input so that the system will be the first device connected to the line. This type of connection will prevent disconnecting the system and enable efficient "line snapping".

The rest of the telephone devices (telephone, answering machine, etc.) need be connected to the SET terminal block in order to enable "line snapping" (i.e. at time of an alarm these devices will be disconnected and the system will be able to dial even if the line is busy by one of them).



Drawing 14- Connecting telephone line to control panel

IMPORTANT!

A fax machine or a modem can only be connected to SET input if "line snapping" is enabled.

NOTE:

"2 Ring Snapping" from telephone devices is not connected to "2 Ring Snapping" parameter in "General Parameters" screen.

3.13 TRV/TRU-100

The TRV–100/ TRU-100 is a long-range radio transmitter for communicating with a Monitoring Station.

IMPORTANT!

- Note the below mounting guidelines for installing a Control Panel with an integrated transmitter. Following these guidelines will minimize RF interference:
- Do not mount the Panel close to a metal wall or ceiling
- **Make sure you leave enough space for the antenna between the metal box and the ceiling**
- Install the antenna at a distance from the Control Panel's wiring
- Mount the antenna after you complete all other installations
- Make sure the antenna is straight
- Close the HUNTER-PRO metal box when performing transmission tests

3.13.1 Connecting the Transmitter:

NOTE:

The TRV/TRU-100 can transmit in two frequencies.

1. Mount the HUNTER-PRO 32 metal box on the wall
2. Screw the transmitter to the box (4 screws at the base of the antenna.) Make sure the screws are tightened; else, the transmitter's range can be reduced.
3. Connect the antenna to the transmitter. Make sure the antenna is straight.
4. Make sure the 5-pin cable is connected to the transmitter's Molex (named: "To the system" on the transmitter's sticker.)
5. Connect the other end of the 5-pin cable to the male Molex, placed on the Control Panel's upper left side (named "Transmitter" on the Control Panel.)

Using the second frequency only:

Follow the pervious 1 to 5 instructions, and then:

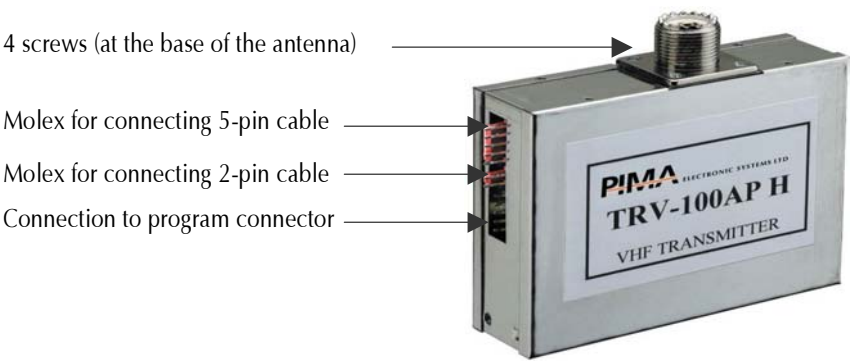
Connect the 2-pin cable to the transmitter's F2 Molex (named F2 on the transmitter's sticker.)

Connect the other end of the 2-pin cable to the control panel depends on the desired transmitter operation:

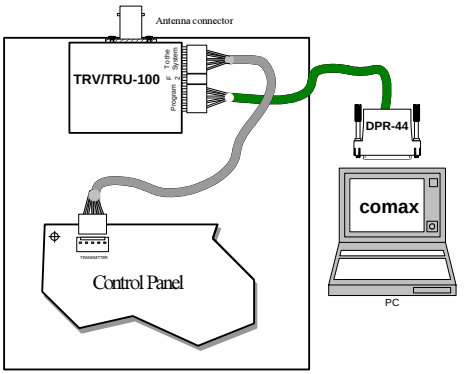
- **To constantly work with the second frequency**:
  Connect it to a negative (-) output on the Control Panel.
- **To work with the two frequencies according to event's type**:
  Connect it to one of the system's outputs, such as AUX1/AUX2

  Program these outputs in "Zone Responses" screen (see section 5.3.4)

  The suitable parameters need be programmed in "Communication Configuration" screen (see section 5.4).



Drawing 15-Cable connections to TRV/TRU-100



Drawing 16- Connecting TRV/TRU-100 to control panel

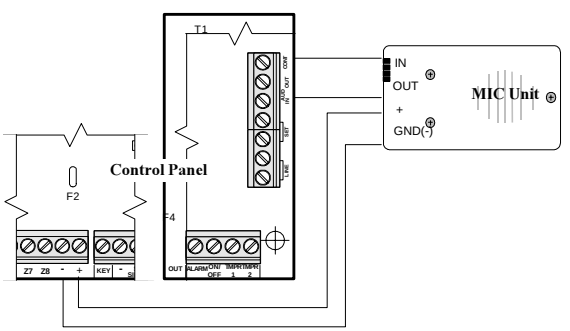
3.14 Microphone Unit: MIC-100

Connect Mic-100's IN output to the control panel's OUT terminal.

Connect Mic-100's OUT output to the control panel's AUD IN terminal.

Connect MIC-100's (-) and (+) to the detectors' power source.

NOTE:
MIC-100 is supplied without wires.



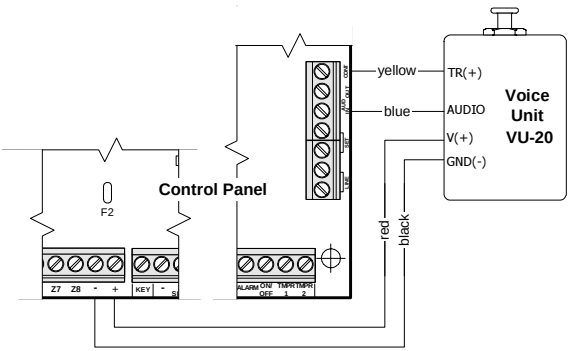
Drawing 17- Connecting MIC-100 to control panel

3.15 Connecting Voice Unit: VU-20

Connect VU-20's TR input to the control panel's CONTROL output

Connect VU-20's AUDIO output to the control panel's AUD IN input

Connect MIC-100's (-) and (+) to the detectors' power source.



Drawing 18-connecting VU-20 to control panel

3.16 Connecting Battery

The HUNTER-PRO 32 incorporates a rechargeable 12V backup battery. The charging voltage for the battery is 13.8 V.

The system performs two battery tests as well as a manual test:

- "**Low level" test"**: A continuous monitoring for battery failures such as a disconnected wire, poor contact, etc.
- "**Under load" test"**: Checks the battery capacity. This test is conducted in the following cases:

  Each time the system is armed.

  Every day at 24:00.

  Upon applying power to the system.

NOTE:
If the "under load" test fails, the system will respond as programmed in the failure responses (sounding sirens, dialing the Monitoring Station, etc.).

- **Manual battery test**: Enter the Master Code then press and hold the BACK key for a complete system check that also includes a battery check.

3.17 Connecting Mains

IMPORTANT!

Verify that the power cord is disconnected from the mains power supply.

Connect the three power cord wires to the connection terminals of the Power Supply terminals. Verify that the transformer outputs are connected to the AC terminals on the PCB, and that the transformer supplies 2A.

With an Ohm meter, check for continuity between the grounding point on the control panel, PCB and GND terminal, to the electrical outlet grounding point. The resistance must be less than 1 Ohm.

Now you can connect the power cord to the mains power source (230VAC).

NOTE:

A current limit device, such as a circuit breaker, fuse, etc., must be connected in series to the power cord. **You must connect the Electrical grounding!**

- ✦ Connect AC mains power supply.
- ✦ Connect the backup battery to the fast connection terminals, red wire to (**+**) and black wire to (**-**).

IMPORTANT!

Failing to connect the cables as described will permanently damage the control panel!

NOTE:

If you connect the battery before the Mains (AC), an AC FAULT will be displayed until you connect the AC. The AC FAULT will be logged in memory.

3.18 Initializing the System

- ✦ Make sure the connections to the system are in order as described in previous sections.

- Connect AC mains power supply.
- Connect the backup battery to the fast connection terminals, red wire to (+) and black wire to (-).

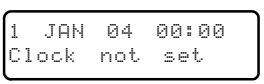
IMPORTANT!

Failing to connect the cables as described will permanently damage the control panel!

NOTE:

If you connect the battery before the Mains (AC), an AC FAULT will be displayed until you connect the AC. The AC FAULT will be logged in memory.

- Close the control panel case and verify that the screws do not touch the battery.



Drawing 6-HUNTER-PRO 32 System Display

When connecting the voltage (AC or battery) a buzz is extracted from the keypad, and the display shows the keypad's type, version, and ID. After a few seconds the regular display returns (see drawing 6). Then, the Fault LED blinks, and a message that the clock is not set.

After all faults are handled, the red LED ceases to blink and the Default Display disappears.

3.18.1 Setting Time:

Enter time (HH:MM format) and 

Enter Full Date and then press 

and then 

NOTE:

Use the BACK and SERVICE NEXT keys to move the cursor to the left and to the right.

Another way to access User Menu:

Technician Code

CHAPTER4 OPERATING & PROGRAMMING THE SYSTEM

4.1 General

The HUNTER-PRO 32 is supplied with factory default parameters. In most installations you will have none or a few parameters to program, except for user-specific parameters such as telephone numbers, zone names etc.

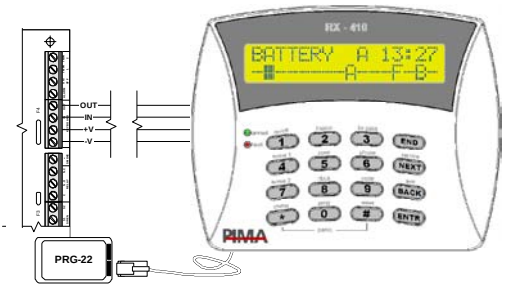
4.2 Programming Possibilities

There are four different ways to program the HUNTER-PRO 32:

- ✦ Fast Local-Uploading with the PIMA Fast Programmer PRG–22. The PRG-22 connects to any LCD keypads
- ✦ Local Up/Download with a PC, LCL–11A PC interface, and COMAX software
- ✦ Remote Up/Download over the telephone line with a PC, modem, and dedicated COMAX software from PIMA
- ✦ Manual programming with LCD keypad

4.2.1 Programming with the Fast Programmer PRG-22

This type of programming can be done only via the installer menu and an LCD Keypad. Connect the PRG-22 to the designated connector according to the following drawing. In RXN-400/410 LCD keypad models the RJ-22 connector is internal, on the PCB's upper left side. Refer to section. 5.9.3 for fast programming procedures.

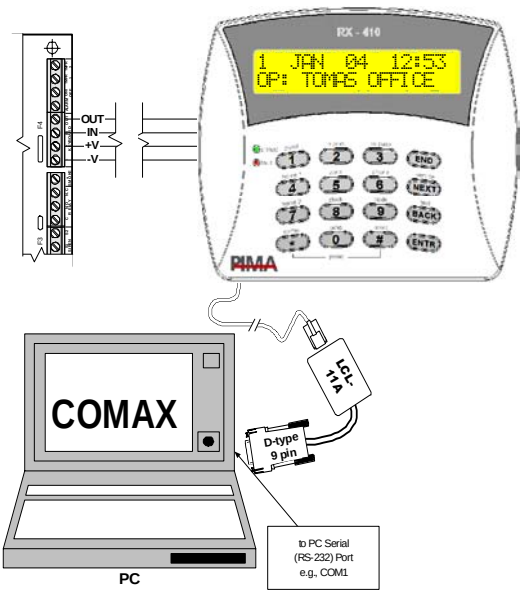


Drawing 19-Connecting LCD Keypad to Control Panel and PRG-22

4.2.2 Local Programming with COMAX & LCL-11A

In order to commence local programming with the COMAX software, you need to use the LCL-11A adaptor. The LCL-11A is an interface between the HUNTER-PRO 32 system and a PC with the COMAX Upload/Download Software. The LCL-11A provides fast, easy, and convenient programming. You can program the parameters in advance and "upload" them after you complete the installation.

The LCL-11A connects to the PCB inside the customer's keypad (on the PCB's upper left side). Refer to section. 5.9.3 for fast programming procedures.



Drawing 20-Connecting Keypad to Control Panel and COMAX

3.18.1 Remote Programming with Modem and COMAX

You can program the HUNTER-PRO 32 over a telephone line with a PC, PIMA modem, and the COMAX programming software. In addition to programming, you also have access to the memory log. Please refer to the COMAX User Manual for detailed information

3.18.2 Programming with a Keypad

In addition to the above programming methods, it is always possible to program HUNTER-PRO 32 directly through the keypad. For your comfort, all the system's functions are organized in friendly and easy to use manuals

HUNTER-PRO 32 has two types of menus:

User Menu: One-press keys in order to facilitate use and speed programming procedure. The function is written above the keypad's keys and you only need to enter the Master Code/User Code, and then press the desired key

Technician Menu: The technician's programming screens are organized in menus

4.3 Programming with a Keypad

4.3.1 PIMA Programming Method

Drawing 21- Example for a Zone Status Bar

All programmable parameters in HUNTER-PRO 32 are divided according to subjects presented in menus. Additionally, the Zone Status Bar greatly facilitates field programming in cases of "YES/NO" options by presenting all these options in a single screen.

When the blinking sign ▦ reaches one of the parameter letters, the display changes for 3 seconds and shows the this function's full name and a brief description.

4.3.1.1 Manu Navigation

Navigation is possible through the menus and parameters by using the following keys:

EXIT/DELETE key. Pressing this key deletes changes enacted on parameters or exits a current menu.

BACKWARDS/FORWARDS keys navigating between a Menu's options or parameters presented in the same screen,
and between the options in the YES/NO programming screens (i.e. Zone Status Bar, section 4.3.1).

SELECTION/CONFORMATION key. Pressing this key selects the desired menu or option presented on screen. After changing parameters, pressing this key confirms and saves the changes in the system's Memory.

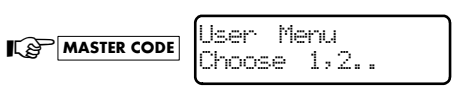
RESET key. Pressing this key resets parameters in screens where numbers are programmed (i.e. telephone numbers, Account Numbers to Monitoring Station, etc.)

4.3.2.3 Key Menu Description

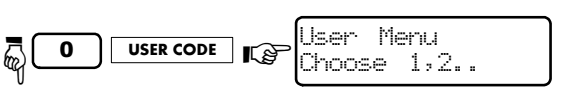
4.3.2 Entering "User Menu"

There are three ways to enter the user menu:

4.3.2.1 Using Master Code



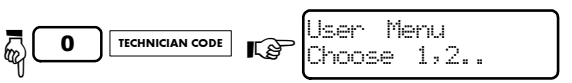
4.3.2.2 Using User Code



NOTE:

- When the parameter (M) is enabled (User Code>Menu) in General Parameter screen (see section 5.6), it is possible to enter the user menu directly without long-pressing the PROG. 0 key. In this case, actions such as arming and disarming are not automatically activated and the arming/disarming key must be pressed. For example, for arming the system you enter the user code, and then press the ON/OFF 1 key.
- User Code is not authorized to change Master Code.

4.3.2.3 Using Technician Code



NOTE:

When the User Menu is accessed with Technician Code, it is impossible to change codes.

CHAPTER 5
TECHNICIAN MENU

5.1 Entering Technician Menu

System Default Codes

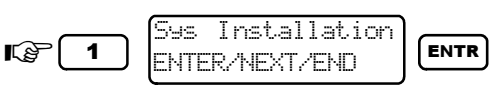
5555 Master Code

1234 Technician Code

In order to enter Technician Menu:

-OR-

5.2 Installing the System



In this screen the system's general parameters are programmed (parameters such as names, type of expender, amount of keypads etc.) In this menu the following functions are programmed as well:

5.2.1 Service Provider

In this screen it is possible to program the system supporter's name and phone number.

Press and hold the NEXT key in order to view the entered information (this feature is possible only when the system is in OFF mode).

In order to see how to enter names (letters and digits), turn to Chapter 8: "Name Programming".

5.2.2 Wire Expenders

☞ 1 | Sys Installation ENTER/NEXT/END | ENTR | NEXT | Expanders ENTER/NEXT/END | ENTR

In this screen you program the type of Wire Expenders installed in the system.

5.2.2.1 Local Expansion

XM
-

NEXT | BACK / ENTR

The mark "+" under the "X" signifies that an 8-additional-zones local expender is installed in the system (EXP-LOCAL).

NOTE:

It is not possible to simultaneously install in the system local expender and zone doubling.

The mark "+" under the "M" signifies that zones 1 to 8 are regular zones while zones 9 to 16 are doubled zones (using a resistor and a diode).

To change the mark from "-" to "+" and vice versa use # key

To move backwards/forwards between "x" and "M use NEXT and BACK keys

To enter "X" and "M" parameters use ENTR key

5.2.2.2 Remote Expenders

```
Remote Expanders
0
```
ENTR

In this screen you program the amount of remote expenders (I/O-8) installed on the keypad's BUS.

It is possible to install up to three expenders in the system.

NOTES:

- If a parameter larger than possible is entered into the system, the system will reset the parameter.
- If the EXP-LOCAL expender is installed, only two more expenders can be added to the system.

5.2.3 Wireless Expender

 1 → `Sys Installation` / `ENTER/NEXT/END` → ENTR → NEXT x2 → `Wireless Expand.` / `ENTER/NEXT/END`

ENTR → `Wireless Expand.` / `0 Zones`

In this screen you program the amount of wireless zones connected, if a wireless expender is installed in the system. It is possible to program up to 16 zones.

IMPORTANT!

The wireless zones are programmed only after the other expenders. Meaning:

If there are no other expenders, the wireless zones are 9 to 24.

If there is a local expender, the wireless zones are 17 to 32.

If all the 'wire expenders' possible are installed, it is not possible to install wireless zones (for the zone numeration table, refer to section 3.3).

After programming the number of wireless zones in the system, you need to program the Jam Signal Level and the duration of time for the Supervision signals (i.e. "life signals").

```
Block Level: 0
Supervision: 0
```

Jam Signal Level: The receiver's frequency minimum signal level (RSSI) to which the system will respond. There are 11 levels from which you can choose, rating from "0" to "10". "0" means this feature is neutralized and from "1" until "10" there is s gradual rise.

NOTE:

Jam Signal Level has to appear for at least one minute before the system can respond to it.

Supervision Signal: The duration of time (in hours) in which the Control Panel expects to get a Supervision signal from each of the wireless detectors.

IMPORTANT!

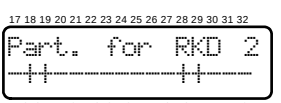
Since wireless PIR detectors transmit a Supervision signal approximately every three hours, the duration of time between each signal has to be longer than 3 hours.

5.2.4 Keypads

In this screen the total number of keypads connected to the system is programmed (remember there cannot be more than 8 keypads). For example, entering this data is required when a TAMPER switch is used to protect the keypads.

5.2.5 Keypads Partitions

If a number of keypads were configured in the system, it is possible to allocate them to partitions:



For example: if keypad 2 is designated to work with partition 2, a "+" is to be marked above 2 in the LCD screen.

NOTE:
Keypad partitions are only activated in case of a partitioned system.

5.3 Zone Programming

☞ **2** | Zones
ENTER/NEXT/END | **ENTR**

In this menu all the system's zones are programmed (wired, wireless, original and expanded). In this menu the following functions are programmed:

5.3.1 Zone Characteristics

☞ **2** | Zones
ENTER/NEXT/END | **ENTR** | Zone Configur.
ENTER/NEXT/END

ENTR | Alarm
ZONE 1 1 | **ENTR** | BOFHHIDTEPDE
---++▮-++---

After the bar is programmed press **ENTR** and move to the next zone

In this screen the zone's characteristics are programmed (i.e. Alarm, Panic, Smoke). The characteristics can be changed according to "Zone Responses" (refer to section 5.3.4).

It is also possible to program the zones with different Alarm, Panic or Smoke characteristics. In addition to the three basic characteristics there is: Special Alarm 1, Special Alarm 2, Special Alarm 3, Special Panic and Special Smoke

Only after setting the zones' shared characteristics the changes concerning specific zones can be programmed. Each of the following characteristics can be programmed for each of the zones:

NOTE:

- To navigate on bar, use NEXT and BACK keys.
- Marking a "+" under a parameter's letter enables the zone with this parameter. Marking a "-" denies this possibility.
- In order to change the mark from "-" to "+" (and vise versa) use #

Par.	Para. Full Name	Enabling this parameter means...
B	Bypassed Permanently	(+) Permanently bypass a zone
0	Normally Open	(+) Connect NO detector to a zone
F	24 Hour Zone	(+) Zone active 24 hours
H	Active in Home 1	(+) Zone active in Home 1
H	Active in Home 2	(+) Zone active in Home 2
I	Entry Delayed	(+) When system is armed this zone does not activate alarm immediately (only after Entry Delay time) Possible to program two different sets of Entry Delay time.
D	Zone Follower	(+) When system is Armed and this zone is activated after Entry Delayed zone, it does not activate alarm immediately (only after Entry Delay time). .
T	Second Delay Time	(+) In order to choose the second "Delay Time"
E	EOL Resistors	(+) Zone protected by EOL resistor/s. For determining if system uses one EOL or two, refer to "General Parameters" in section 5.6.

P	Following Zone	(+) Zone activates alarm only when his "paired" zone activated alarm.
D	Double Pulse	(+) Zone activates alarm only after two successive pulses occur in the duration of time set in Timers Menu.
E	Customer Cancel	(+) Cancel zone before arming the system (user cannot cancel Smoke Zone or Panic Button).

5.3.2 Zone Name

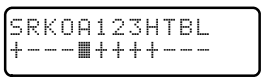
In this screen the zones' names are programmed (refer to chapter 8 for further instructions how to program names).

5.3.3 Partitioning

Drawing 22-Allocating zones to a partition

In this screen you set the partitions to which the zones are allocated. Setting the partitions along with setting the keypads' partitions determines the nature of the system (i.e. Split System / Partitioned System). Further explanation on Partition and Split options is found in chapter 2).

5.3.4 Zone Responses (Templates)



Drawing 23-Zone Responses screen

In this screen the three basic zone responses are programmed: Alarm Panic and Smoke. All the zones that get the same characteristics shall have the same responses (refer to Zone Programming" in section 5.3.1). In addition to these three, there is also: Special Alarm 1, Special Alarm 2, Special Alarm 3, Special Panic and Special Smoke.

S: Siren

R: Relay

K: Smoke Output

O: ON/OFF

A: ALARM

1: Expender 1 Output

2: Expender 2 Output

3: Expender 3 Output

H: Private Dialer

T: Different Siren Tone

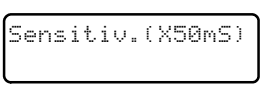
B: Automatic Bypass

L: No Monitoring Station during daytime (e.g. Fire Exit)

Zone sensitivity 5.3.4.1

After programming the zone characteristics in each if the three basic groups (Alarm, Panic and Smoke), you need to program the zones' sensitivity by multiplying the characteristics by 50msec (for example, to program 200msec sensitivity, press 4).

In order to access this screen, press ENTR after zone configuration is finished:



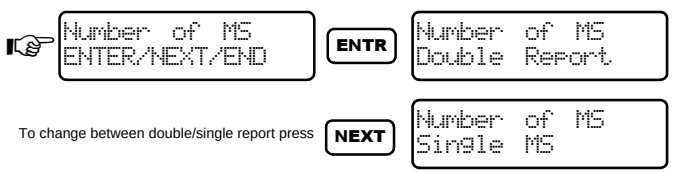
5.4 Communication Parameters

In this menu all the system's communication functions are programmed: the Monitoring Stations, Telephone Numbers, Report options, Formats, etc.

5.4.1 Communication to Central Monitoring Station

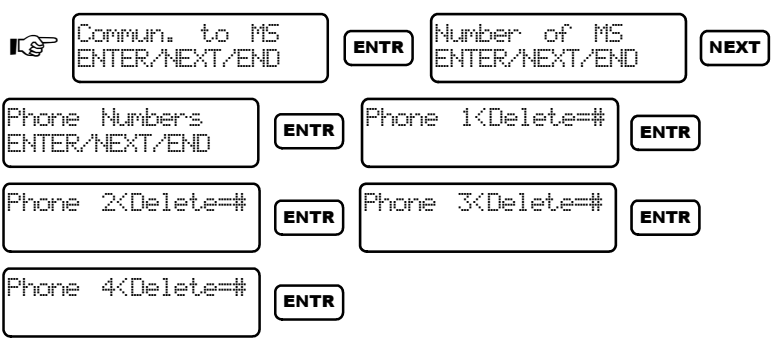
In this menu all the functions related to the Monitoring Station are programmed.

5.4.1.1 Number of Central Monitoring Stations



In this screen it is possible to choose between a single or double report to the Monitoring Station. In case of a double report, the two first telephone numbers belong to Monitoring Station 1, and the third and forth telephone numbers belong to Monitoring Station 2.

5.4.1.2 Telephone Numbers



In this screen you program the telephone numbers of those Monitoring Stations to which events are reported. Each Monitoring Station is programmed to receive reports to certain events (i.e. Alarm, Panic, Smoke etc.).

5.4.1.3 Monitoring Station 1 Options

In this screen all features of Monitoring Station 1 are programmed.

- **Monitoring Station Protocol:** In this screen the Monitoring Stations' are programmed.

```
MS  1  Protocol
0   230
```

- **Monitoring Station Reports:**

```
APFOLTWI
▀+++++++      1
```

In this screen the type of events reported to the Monitoring Station are programmed:

- **A:** Alarms
- **P:** Panic
- **F:** Fire
- **O:** Open/Close
- **L:** Faults
- **T:** Tests
- **W:** Wake-up test
- **I:** Pressing technician code

5.4.1.4 Monitoring Station 2 Options

In this screen all features of Monitoring Station 2 are programmed.

All screens and programming procedures are similar to those in Monitoring Station 1.

5.4.1.5 Partition Account Numbers

```
Account No.1
Pho:0     Rad:0
```

In this screen the Partitions' Account Numbers (1-16) for telephone (Pho.) and RF Transmitter (Radio) reports are programmed.

IMPORTANT!

- In case Splits and Partitions are programmed in the system, their Account Numbers need be programmed as well.
- If an Account Number is not programmed, there will be no report for its Partition/Split.
- In a system with no Partitions/Splits, all settings will be registered under "Partition 1".

5.4.1.6 General Monitoring Station Options

In these screens the Communication's different features are programmed:

- **Test Time and Interval:**

```
Test Time:00:00
Interval:24 Hrs
```

Test Time: The automatic test time is programmed in 24 hour format (HH:MM). Note that the test time is similar to that of the PSTN communication and radio backup to monitoring station.

Interval : The time between communications with the Monitoring Station is programmed. The test is done by wired line (telephone) and wireless line (Radio or GSM, depending on which is installed.)

- **Wait Time:** In this screen you program the waiting time (in seconds) until getting a confirmation sound from the Monitoring Station.

```
Ack Wait time
20 Seconds
```

5.4.1.7 Report Codes 4x2

These screens enable to program the different events' Report Codes in 4x2 format (including all American formats.)

Each of the code's digits can receive the value "0" to "15". Values "10" to "15" are represented by the letters "A" to "F" respectively, thus:

- A=10
- B=11
- C=12
- D=13
- E=14
- F=15

Changing a Report Code:

- Enter the event you want to change
- Place the cursor **on** the event's digit using 

and 

keys
- Press the keypad keys in order to choose a digit from "0" to "9"

- Press the 

key as many times as needed in order to choose a letter between "A" and "F"

Event Table in 4 x 2 Format

Z1 ,Z2 ... ,Z32	Alarms according to zones.
R1 ,R2 ... ,R32	RESET Code according to zones- reported after Siren Time. When the system is programmed for reset according to zone, the code will be reported only if the zone was closed.
ZFL	Faults according to EOL zones
BYP	Bypass Zones
R1 ,R2 ... ,R32	RESET Code according to zones- reported after Siren Time. When the system is programmed for reset according to zone, the code will be reported only if the zone was closed.
TM1-ו ,TM2	Open TAMPER 1 and/or TAMPER 2 and their Reset Codes
AC	Mains voltage failure (AC Fall) and Reset Code.
LB	Low Battery and Reset Code
PF	Card voltage lower than 9 volts (System Shutdown) and Reset Code. Low card voltage indicates AC Fall and Low Battery.
PHN	Telephone Line Fail and Reset Code.
FUS	Detector Voltage Fault and Reset Code.
TST	Test (manual, automatic, or "wake-up").
PNC	Panic
ARM	Arming System
DISAR	Disarming System
FCODE	False Code

Note

In the display, the Reset Code appears as "REST" to the event's right.

In case of a Double Report it is impossible to send a different 4X2 report to both Monitoring Stations. It is possible to send a 4X2 report to one Monitoring Station, and send a PAF or Contact ID report to the other Monitoring Station.

Different Double Report Options

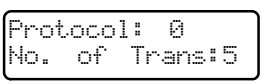
MS Format 1	MS Format 2	Event Report to MS 1	Event Report to MS 2
PIMA	PIMA	Default	Default
American	PIMA	Programming*	Default
American	American	Programming	Programming
Contact ID	Contact ID	Default	Default
American	Contact ID	Programming	Default
PIMA	Contact ID	Default	Default
Contact ID	PIMA	Default	Default

*Programming: According to the installer's programming.

5.4.2 Radio Transmitter

In this screen the radio transmitter protocols are configured.

5.4.2.1 Radio Protocol



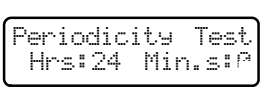
In this screen the Radio Protocol Code is programmed. The code can be retrieved from PIMA's Technical Support department.

5.4.2.2 Number of transmissions

The number of transmissions for each event sent to the monitoring station. The number can range from 1 to 32.

5.4.2.3 Periodicity Test

In this screen you program the time between radio communication tests to the monitoring station (hours and minutes).



5.4.2.4 Radio Report Codes

In these screens the Report Codes to the different Radio Formatted events is programmed.

Each of the code's digits can receive the value "0" to "15". Values "10" to "15" are represented by the letters "A" to "F" respectively, thus:

- A=10
- B=11
- C=12
- D=13
- E=14
- F=15

Changing a Report Code:

- Enter the screen of the event you want to change by pressing ENTR
- Place the cursor **on** the event's digit by using NEXT and BACK

To enter digits/letters representing digits:

- Use keypad keys in order to choose a digit from "0" to "9"
- Press the * key as many times as needed in order to choose a letter between "A" and "F"

5.4.3 Modem Call Back

In this screen you program up to 3 telephone numbers that re-call the modem. It is another safety measure that allows only the installer with COMAX software to enter the alarm system (in order to reconfigure parameters).

5.4.4 Communication Features

In these screens you program the system's communication features (telephone line, automatic test, wake-up test).

5.4.4.1 Number of Rings

```
No. of Rings
ENTER/NEXT/END
```

In this screen you program the number of rings before the system picks up an incoming call.

5.4.4.2 External Line

```
External Line
▒
```

In this screen the area code is programmed in case the system needs an external line in order to make the call (due to switch-board system or a code to access the external line).

Entering the number in this screen saves time of re-entering the numbers in all those screens where telephone numbers for communication are programmed.

5.4.4.3 Programming Telephone Line

```
PTLLTAVDR
▒---+----
```

To enable feature: "+" under parameter

To disable feature: "-" under parameter

NOTE:

- To navigate on bar, use NEXT and BACK keys.
- In order to change the mark from "-" to "+" (and vise versa) use #

Par.	Para. Full Name	Enabling this parameter means...
P	Connected PSTN	System connected to PSTN line
T	No dial-tone	Dials immediately without checking first for a dial tone

	check	(in case system connected via switch-board/ non standard PSTN)
L	Checking line in ON	PSTN checked **every minute** the system is on
L	Checking line in OFF	PSTN checked **every minute** the system is off
T	Tone Dialing	"+" For DTMF "-" For PULSE
A	Answering Machine	In case of two rings, hang-up, waiting for 10 seconds and then another ring, system features line snapping.

NOTE:

Make sure answering machine picks calls after more than two rings

V	Voice Unit	A voice-unit is connected to the system
D	Block Remote-Charge	Connecting to COMAX via modem is disabled. Possible to bypass this feature by pressing Master Code and then ENTER twice.
R	Block Remote Disarm	Remotely disarming the system is disabled.

5.5 TIMERS

In this menu all the timers in the system are programmed.

5.5.1 Entry/Exit Delay

In this screen Entry delay 1 and 2 are programmed (see "Zone Programming" section 5.3 for allocating a delayed zone and its authorization) and the exit delay:

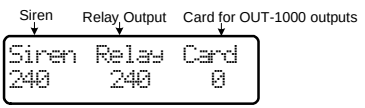
```
Entry  1  2 Exit
      20 20 60
```

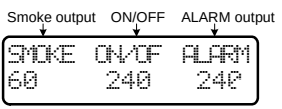
5.5.2 Programming Outputs Time

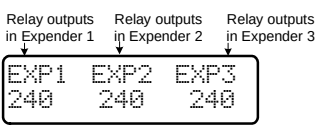
In this screen the various output times in the system are programmed.

NOTE:

The programmed time in this screen is the time that takes an output to return to its previous state. If time is defined as zero (0), the output will change its state until further order that will change that (i.e. no time limit).



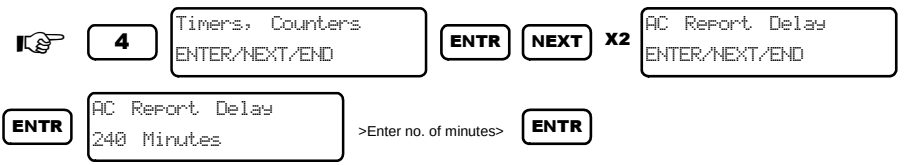




Use NEXT and BACK to navigate inside a screen

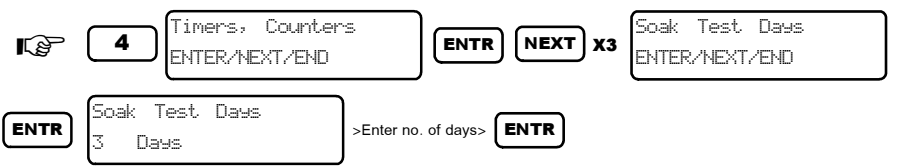
Use ENTR to move to save data and move to the next screen

5.5.3 AC Report Delay



In this screen you program the time the system waits until reporting mains failure (in minutes). Once the system identifies the mains is back, the timer resets.

5.5.4 Soak Test Days



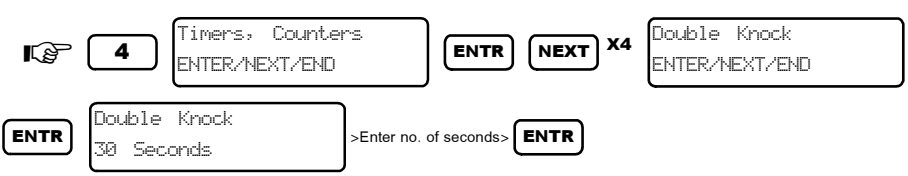
In this screen you program the number of days a zone will be tested. During this period of time, any events initiated by the zone will not be reported to MS nor trigger the alarm/private dialer, etc. These events will only be recorded in the memory log. After this period of time, the zone will return to normal operation.

Thus note that a zone in Test Days is different than bypassed zone.

NOTES:

- The zone's soak test can last up to 3 days.
- In PIMA display: Alarms triggered by a Test Zone in the memory log have the letter "T" under/above their number.

5.5.5 Double Knock



In this screen you program the range of time to verify alarm from a zone (in seconds).

Double Knock is used for reducing false alarms from "problematic" zones. In order for a zone configured as "double knock" to trigger am alarm, it must transmit two events to the system in a predetermined time set in this screen (see "Zone Programming" section 5.3).

5.5.6 Conditioned Zones Time

☞ **4** | Timers, Counters
ENTER/NEXT/END | **ENTR** **NEXT** X5 | Cond. Zones Time
ENTER/NEXT/END

ENTR | Cond. Zones Time
30 Seconds | >Enter no. of seconds> **ENTR**

In this screen you program the time span it takes a conditioned zone to be activated (in seconds). For example, if zone 1 and 2 are conditioned together, and only zone 1 is opened, the alarm will not be triggered for 30 seconds. If after 30 seconds zone 1 is still opened, the alarm will be triggered, and both zones 1 and 2 will be reported as those that trigged the alarm.

5.5.7 Bypass Limit Time

☞ **4** | Timers, Counters
ENTER/NEXT/END | **ENTR** **NEXT** X6 | Byps. Limit Time
ENTER/NEXT/END

ENTR | Byps. Limit Time
0 Minutes | >Enter no. of minutes> **ENTR**

In this screen you program (in minutes) the time in which a zone remains "bypassed" before it is activated.

5.5.8 False Code

☞ **4** | Timers, Counters
ENTER/NEXT/END | **ENTR** **NEXT** X7 | False Code
ENTER/NEXT/END

ENTR | False Code
24 Keystrokes | >Enter no. of keystrokes> **ENTR**

In this screen you program the number of times it is possible to enter a false code after which the system will report it to the monitoring station, preset "False Code" display and react according to the configurations in System Responses menu (see section "System Responses" 5.7).

5.6 General Parameters

☞ [5]

```
Gen. Parameters
ENTER/NEXT/END
```

[ENTR]

In the following group of screens there are different system parameters. Each screen contains up to 16 parameters set together on a bar and presented in two rows: the upper line has the letter parameters, the bottom line presents the "+" (enabled) and "-" (disabled) signs.

Use [NEXT] and [BACK] keys to navigate forward and backwards on bar

Use [#] key to change a certain parameter's sign

Use [ENTR] key to confirm

Use [END] key to exit without save.

> **NOTE:**
> Each time the cursor in the screen stands on a certain parameter, automatically a description of this parameter appears for 3 seconds.

5.6.1 General Parameters First Screen

```
KE1E2EKAB2SMPZT
▓++---+-++--+--
```

[NEXT] [BACK] / [ENTR]

> **NOTE:**
> - To navigate on bar, use [NEXT] and [BACK] keys.
> - Marking a "+" under a parameter's letter enables this parameter. Marking a "-" denies this possibility.
> - In order to change the mark from "-" to "+" (and vise versa) use [#]

Par.	Para. Full name	Note
K	Key State	(+) Switch key (-) Momentary key
D	DC Siren	(+) DC Siren (-) Horn Siren
1	TAMPER 1	(+) TAMPER 1 connected
E	TAMPER 1	(+) TAMPER 1-EOL protected
2	TAMPER 2	(+) TAMPER 2-connected
E	TAMPER 2	(+) TAMPER 2-EOL protected
K	Key->Home state	(+) Arming with key will activate HOME 1
A	Automatic->Home	(+) Automatic arming will activate HOME 1
B	Bypass zone (automatic)	(+) If there are opened zone when arming with key/Auto Arming, the system will bypass all the opened zones. (-) Opened zones will trigger the alarm
2	2 EOL	(+) 2 EOL for each zone:
S	Siren beep activated	(+) When arming system the siren will beep once and when disarming the system with key/remote control the siren will beep twice.
M	User code>menu:	(+) Typing user code will direct you to the User Menu. (-) User code will arm/disarm the system.
P	PIMA Display (permanent)	Refer to section 4.3.1
Z	Opened Zones scan	(+) Enabled
T	Bypass Tamper in arming	(+) Enabled
F	Bypass fault in arming	(+) Enabled

5.6.2 General Parameters Second Screen

NOTE:

- To navigate on bar, use NEXT and BACK keys.
- Marking a "+" under a parameter's letter enables this parameter. Marking a "-" denies this possibility.
- In order to change the mark from "-" to "+" (and vise versa) use #

Par.	Para. Full name	Note
A	ON/OFF follows arming	(+) In ON/OFF output, there will be "-" in GND. (-) GND is not "-" in ON/OFF
B	Buzzer	(+) Alarm output will be activated when buzzer is activated
S	Siren	(+) Keypad buzzer will be activated simultaneously with siren.
F	Fast arming	(+) Pressing and holding the 1 key, will fully arm the system. Press and hold the 4 key will arm the system in HOME 1 state. Press and hold 7 key will activate HOME 2 state.
1	Bypass HOME1 delay	(+) Enabled
2	Bypass HOME2 delay	(+) Enabled
Z	Present alarms in ON	(+) The system will present the zones that triggered the alarm when it was ON.

NOTE:

Each time the cursor in the screen stands on a certain parameter, automatically a description of this parameter appears for 3 seconds.

5.7 System Responses

In these screens the system responses to special events are programmed (such as faults, false code, etc.) when the system is ON and OFF.

5.7.1 System in ON State

☞ [6] → System Response / ENTER/NEXT/END → [ENTR] → System ON / ENTER/NEXT/END → [ENTR]

In this screen you program the system responses to various events and faults occurring when the system is **ON**:

- Mains failure
- Low battery
- Zone/tamper faults
- False code
- PSTN fault

When [ENTR] is pressed in any of the above System Responses screens, the following parameter bar appears:

```
SRKOA123HP
++--+----+
```

Use [NEXT] and [BACK] keys to move right/left on the bar.

Each time the cursor stands on a certain parameter letter, this parameter's full name will spear for 3 seconds.

Pressing [ENTR] on a certain parameter letter will access this parameter.

S Siren
R Relay
K Smoke output
O ON/OFF
A Alarm
1 Expender1 output
2 Expender2 output
3 Expender3 output
H Private dialer
P Report to CMS

5.7.2 System in OFF State

☞ [6] → System Response / ENTER/NEXT/END → [ENTR] → [NEXT] → System OFF / ENTER/NEXT/END → [ENTR]

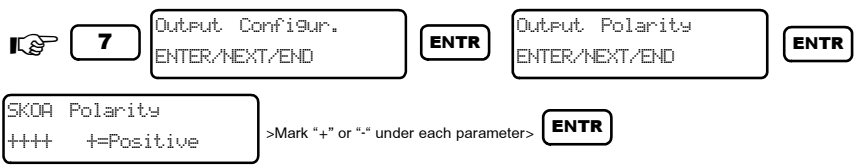
In this screen you program the system responses to various events and faults occurring when the system is OFF. All screens similar to those in ON (previous section).

5.8 Programming Outputs

In this screen the system's outputs are programmed.

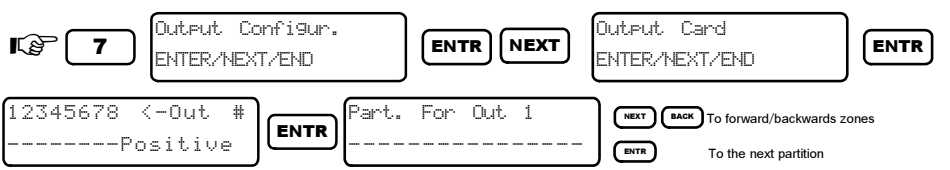
5.8.1 Polarity

In this screen you program the manner in which each of the following outputs operates:



Par.	Para. Full name	Note
S	Siren	(+) When using DC siren, the output's polarity changes.
K	Smoke output	(+) Smoke when output is activated.
O	ON/OFF output	(+) ON/OFF output is activated.
A	Alarm	(+) Alarm output is activated.

5.8.2 Output Cards



In this screen OUT-1000's outputs are allocated to partitions 1 to 16. when there is an alarm from one of the partitions allocated to a certain outputs, the output will be activated. This way, it is possible to activate separate sirens for the different partitions, activate blinkers, and so on.

5.9 Programming the Entire System

This menu is for uploading the system with parameters configured in COMAX and-or reset the system back to defaults.

5.9.1 Initializing System

☞ **8** | Full Programming
ENTER/NEXT/END | **ENTR** | System Defaults
ENTER/NEXT/END | **ENTR**

and then to confirm:

Are You Sure?
ENTER/NEXT/END Press **ENTR** to confirm.

When system initialization is executed, all system parameters reset to defaults:

Defaulting
Please Wait... at the end of initialization Syst. Defaulted
Press END

5.9.2 Local Download

☞ **8** | Full Programming
ENTER/NEXT/END | **ENTR** | **NEXT** | Local Download
ENTER/NEXT/END

ENTR | Local Upload
Programming | **ENTR**

Using this feature, HUNTER-PRO 32 is connected directly to a local computer running COMAX and connected to the system using LCL-11A adaptor that is connected to the keypad (see section 4.2.2 for connecting programming keypad with LCL11A).

Pressing **ENTR** when display shows Charge activates the local charge, shift control to COMAX and show the message: OTHER KEYPAD IN USE.

5.9.3 Fast Programming

☞ **8** | Full Programming
ENTER/NEXT/END | **ENTR** | **NEXT** x2 | Fast Load
ENTER/NEXT/END

ENTR | Fast Loading
..... | Please Wait... | Display returns to regular status dispaly

This feature is for fast-loading HUNTER-PRO 32 with parameters from the Fast-Programmer PRG-22. The programmer needs to be connected to the right plug in the keypad before activating this feature. Furthermore, a filed from which the parameters are uploaded need be chosen (1 or 2).

5.10 Installer Code

In this menu the technician code is changed. The new code is between 4-6 numbers.

IMPORTANT!

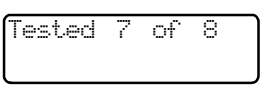
If the Installer code begins with zero (0) the code will not reset to the system's default, in case of power OFF (cut AC and DC). this is another measure taken to protect the system.

5.11 Tests

This menu is testing both wired and wireless zones, dialer, transmitter and sirens.

5.11.1 Walk Test

This is a general walk-test that checks all the zones activated in the system. During the test the following screen appears:



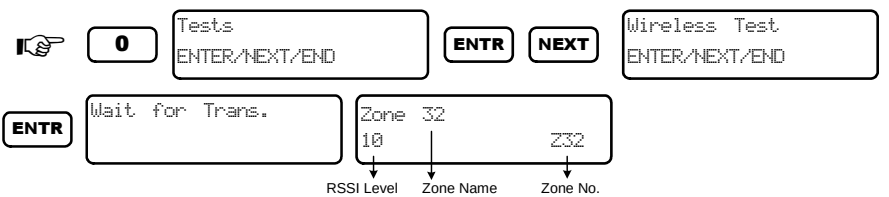
The memory log keeps record of the test, including the number of zones activated. Pressing ENTR will present the names of the zones not tested in the following display:

Untested Zones: UT: Living Room	and if all zones were tested:	Untested Zones: All Zones Tested

Use NEXT and BACK keys to scroll between the zones.

This test is extremely useful at the end of installing the system in order to make sure all the zones are in order and connected to the system.

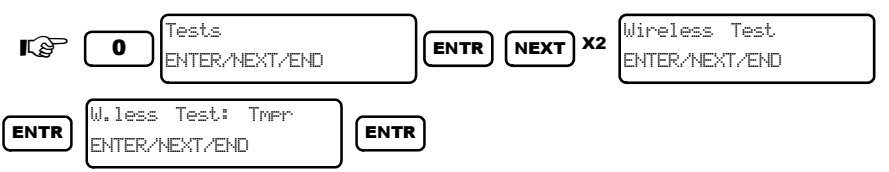
5.11.2 Wireless Test



This test is a walk-test (similar to that in the previous section) yet only for wireless detectors. A transmission from a detector will activate a display of the detector's RSSI and be recorded in the memory log.

This test is extremely useful for finding the best location for wireless detectors and their optimal regularity.

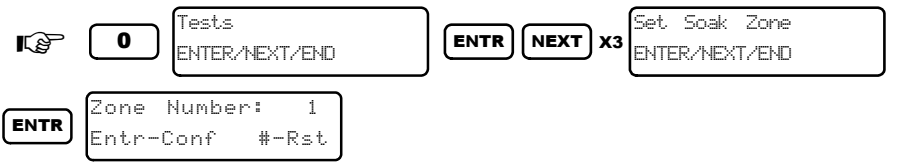
5.11.3 Wireless TAMPER Test



This test is for checking a single wireless detector using the detector's tamper. The system will present only the tamper signals receives from the detectors.

This test is extremely useful for finding the best location for a specific wireless detector and when there is motion in the rest of the system's zones.

5.11.4 Configuring Soak Test Zones



When a detector is suspected of causing false alarms, it can be put to the test in this screen. All events from a test zone will not trigger the alarm. If for a defined term of time the test zone does not indicate an alarm event, the zone will return to operate normally.

5.11.5 Siren Test

- Pressing ENTR will activate the siren
- Press END to cancel the test

5.11.5 Monitoring Station Dialer Test

This test is for checking the central monitoring station's dialer. Pressing 1 will send a test report to the monitoring station for telephone number 1.

Pressing 2 will do so for telephone number 2, and so on.

5.11.6 Central Monitoring Station Radio Test

This test is checking the wireless transmitter. Pressing ENTR will cause the system to send a transmission test to monitoring station.

5.12 Remote-Controlling via Telephone

The system can be controlled from afar using any dial-tone telephone, including cellular phone. It is possible to control the system once the communication between the system and the telephone has been established.

- The communication can be initiated either by the system calling the telephone, or manually by the user:
- Dial the telephone number the system is connected to
- Wait for the system's confirmation tone (long continuous tone and two beeps)
- Wait until the confirmation tone is over
- Enter the master code
- Wait for a few seconds until the system produces a confirmation sound using one of the following two:

———— Continuous tone System disarmed

---------- Segmented tone System armed

NOTE:

The system will not receive orders from the telephone before the confirmation sound is over.

From this moment the system can be controlled via telephone. After each telephone key press, the system will confirm with two short beeps. After the confirmation beeps, the further telephone keys can be pressed for further operations:

Key [1] Arming the system
Key [2] Disarming the system
Key [4] Arming the system to HOME1
Key [5] Relay ON
Key [6] Relay OFF
Key [7] Arming the system to HOME2
Key [8] Microphone ON for one minute. Each further press of this key during this minute prolongs it in one minute

Key [0] Siren and Dialer OFF. The dialer will not dial to the private numbers

NOTE:

During communication time between the system and the telephone the following message will appear on LCD screen: Other keypad in use". If the system does not receive any order within a minute's time, it will disconnect and return to regular operation. The system will remain in standby for one further minute with the above display even though the communication was disconnected.

CHAPTER 6
NAME PROGRAMMING

Writing names in HUNTER-PRO 32 is done by the LCD keypad. Each key has allocated characters (letters/numbers/signs).

SERVICE NEXT and BACK to move cursor right/left

PROG. 0 Space and delete characters

ENTR Save data

NOTE:
The order of characters is identical to that in a cellular telephone.

. , ? ! 1	A B C 2	D E F 3	Cancel
ON/OFF 1	MEMO. 2	BYPASS 3	END
G H I 4	J K L 5	M N O 6	Next char.
HOME 1 4	ZONE 5	PHONE 6	SERVICE NEXT
P Q R S 7	T U V 8	W X Y Z 9	Prev. char.
HOME 2 7	CLOCK 8	CODE 9	BACK
( ) / * : - + #	0		Save
CHIME *	PROG. 0	RESET #	ENTR

CHAPTER 7
TROUBLESHOOTING

The HUNTER-PRO 32 incorporates many operating parameters and options. Some of the system operations depend on the method of programming, and if one of the parameters is not programmed correctly, the operation depending on it will not be executed. This chapter describes the failures displayed on the keypad and their meanings, as well as various problems that may be encountered due to improper programming, and options for troubleshooting the failures that might occur due to incorrect installation and/or programming.

7.1 Restoring Master & Technician Codes

For maximum end-user protection and security, it is not possible to program the system without knowing the Master Code. If for some reason the Master Code is not available, then follow these steps to access the system:

- Open the Control Panel box.
- Disconnect Mains AC voltage from the system.
- Disconnect the battery.
- Wait several seconds and connect the battery.
- Wait until the display appears on the keypad unit.
- Enter the factory default Master Code (5555).
- Program a new Master Code (it is not possible to see the old code).
- Connect Mains AC voltage.
- Close the Control Panel box.

NOTE:

- After connecting the battery, the system enables access using the default code (5555) for 30 seconds only. If access does not occur during this time, the process need be repeated from starters. If the battery is low, connect the main voltage.
- The process above is also useful for technician code (Default code 1234). With the exception of technician code that starts with 0.

7.2 Displaying System Faults

In case of a Failure, the Failure LED on the keypad blinks. The description of the failure appears on the first line of the LCD Keypad at the right side. The possible failure indications are:

MESSAGE	DESCRIPTION
Clock	Clock failure (clock not set)
Low Battery	Low battery power, check the battery or charging voltage
Low DC	Very low battery, appears before the battery is drained, usually after prolonged power failures
AC Line	No mains power
TAMPER 1	Tamper 1 is open
TAMPER 2	Tamper 2 is open
Zone	Zone failure due to line cut or short.
Communic.	Failure to communicate with the Monitoring Station.
Keypad not connected	No communication between the keypad and HUNTER-PRO PCB
Telephone	The system did not recognize a dial tone
Auxiliary Power Failure	Detector power supply failure

When several keypads are connected simultaneously to the system, and one of them is used for programming the system, the other keypads' display will show

"Other keypad in use". This message appears also when the system is being programmed from a different source such as remote programming via computer and telephone.

7.3 Solutions

7.3.1 Clock

This failure appears after initial connection to Power such as first time operation or operation after AC and battery backup failure.

Solution:

Update time and date (refer to section. 2.2.12 and 2.18).

7.3.2 Battery

Battery failure indicates low battery power and appears after battery test and after a pro–longed AC failure. (Refer to section. 2.16).

Solution:

- ✦ Make sure battery fuse is intact.
- ✦ Verify charging voltage.
- ✦ Wait 24 hours for the failure message to disappear.
- ✦ Replace the battery if the failure persists for a couple of days.

7.3.3 Low DC

Indicates a very low DC supply to the PCB. This failure is a result of a prolonged AC failure that drains the backup battery. During this failure you can not change any system parameters.

Solution:

- ✦ Connect AC.
- ✦ If necessary, replace battery.

7.3.4 AC Line

AC mains power failure. If other electrical appliances are working, then check the entire AC conduit to the system.

Solution:

- Connect AC power.
- If you find a blown AC fuse, then replace the fuse; if failure persists then replace the PCB.

7.3.5 Tamper

TAMPER 1: Tamper 1 is open.

TAMPER 2: Tamper 2 is open.

7.3.6 Zone

This failure can only appear in zones programmed as EOL protected, indicating a short/disconnection of zone/s.

The LCD display will show the zone with the failure by marking a sign close to the zone's number.

7.3.7 Keyboard Not Connected

This is an indication that there is no data transfer between the control panel and the keypad. Check the following:

- Proper connection between the "OUT" terminal on the control panel and the input to the keypad via the yellow wire.
- Keypad receives 13.8V power supply. If the power source is not high enough then check that there are not to many keypads connected to the system (8 keypads max).
- During RAM Test a message might appear. This is not a failure.
- The Jumpers at the back of the keypad correspond to system programming or partitioning.
- Check for malfunction in the keypad – Replace Keypad.

- Check for malfunction in the control panel – Replace PBC.

NOTE:

If there are several keypads connected to the control panel and all show the same indication then either the control panel PCB is malfunctioning or there is a short on one of the wires.

7.3.8 Telephone

The system did not recognize a dial tone. Appears after lack of communication on the last dialing trial.

The failure indication will remain while the system is disarmed even though the line and/or tone return.

To eliminate the ongoing display of this failure; run the TEST procedure by pressing and holding the BACK key until the test procedure begins. The system will perform a self–test that includes an update of telephone status.

NOTE:

Assure that no telephones or other equipment connected to the telephone are active during the system dialing.

7.3.9 Communication

7.3.9.1 No telephone communication to MS during test mode

This indication appears if the HUNTER-PRO communicator cannot transfer reports to MS. Possible reasons for this indication is incompatible protocols with the Monitoring Station or phone failure.

Check the following:

- The telephone line is properly connected to the LINE terminal blocks.
- In Communication menu (section. 5.4) the "P" for telephone is programmed with +.
- At least one telephone number is programmed for MS.
- Telephone account ID for MS is other than 0.
- Format is compatible with the one used in the MS.

- Correct telephone numbers have been entered.
- A prefix has been programmed if the system is installed in an office (usually 9).

7.3.9.2 Checking communications to the Monitoring Station:

Enter Installer code without the Master Code, press 

and 

in order to initiate an event and watch the progression of communication to the MS.

7.3.9.3 No Wireless Communication to CMS

Check the following:

- Proper connection between the control panel and the transmitter.
- Radio account ID is other than 0.
- Station radio ID corresponds to the Monitoring Station.
- Format is compatible with the one used in the Monitoring Station.
- If the antenna is not installed on the HUNTER-PRO metal case, check the extension cable for the antenna is intact.
- Backup battery is connected and intact.

7.3.9.4 No Communication to Private Dialer

Check the following:

- The telephone line is properly connected to IN terminal block inputs.
- In Communication menu the "P" for telephone is programmed with +.
- In zone responses + is programmed under subscriber dialer.
- At least one telephone number is programmed for private numbers.
- Correct telephone numbers have been entered.
- A prefix has been programmed if the system is installed in an office (usually 9).

7.3.9.5 System not answering Telephone Calls

Check the following:

- The telephone line is properly connected to the IN terminal block.
- In Communication menu the "P" for telephone is programmed with +.
- The system is programmed to pick up after a reasonable number of rings – not more than 10.

7.3.9 Automatic Arming Failure

Check the following:

- No Clock failure indication.
- The Automatic arming feature is activated – The letter **A** is displayed to the left of the clock.
- Clock is set to the correct time.

7.3.10 Open Zone does not cause Alarm

Check the following:

- The Zone is not temporarily or permanently bypassed,
- The zone is programmed for the correct response, siren, relay, etc.
- If the zone is assigned to more than one partition, then all the partitions it is assigned to must be armed.
- Detectors are correctly installed and are not malfunctioning.
- Zone sensitivity settings.
- Cross zoning settings.
- Pulse counter settings.
- Power supply is not low – AC and backup battery power levels.

CHAPTER 8
TABLES

10.1 Programming System Defaults

System

System Name	PIMA
Autoset Time	00:00
Wireless Setup	0
WL Supervisor Time	0
Jamming Level	0
Number of Keypads	0
Number of Expanders	0
Local Expander	☐
Zone Doubling	☐

Output	Polarity
Siren	Negative
Smoke	Postive
ON/OFF	Negative
ALARM	Negative

Keypad\Part->	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Keypad 1	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Keypad 2	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Keypad 3	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Keypad 4	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Keypad 5	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Keypad 6	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Keypad 7	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Keypad 8	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

2 State Switch	☐
DC - Siren	☐
Tapmer 1 Connected	☑
Tapmer 1 EOL Protected	☐
Tapmer 2 Connected	☑
Tapmer 2 EOL Protected	☐
Key to Home State	☐
Auto. Operation to Home State	☐
Bypass Zones In Auto. Operation	☐
2 EOL Resistors	☐
Siren Beep In Operation	☐
User Code Insert to Menu	☐
Steady PIMA Display	☐
Open Zones Scanning	☑
Bypass Tamper In Operation	☐
Bypass Fault In Operation	☐
ON/OFF Output Follows Operation	☐
ALARM Output Follows Buzzer	☐
Buzzer Follows Siren	☐
Enable Quick Arming	☐
Cancel Delays In Home 1	☐
Cancel Delays In Home 2	☐
Show Alarms In ON State	☑

Exit Delay(sec)	60
Entry Delay 1(sec)	20
Entry Delay 2(sec)	20
Invalid Code Count	24
Siren Time	240
Soak Days	3
Double Knock (sec)	30
Auto Test Time	00:00
Exp.1 Time(sec)	240
Exp.2 Time(sec)	240
Exp.3 Time(sec)	240
AC Fail Time(min)	240
ON/OFF Output Time(sec)	240
ALARM Output Time(sec)	240
Passive Auto Arm. Interval (min)	0
Relay Time(sec)	240
Smoke Time(sec)	60
Pair Time(sec)	30
Bypass Time Limit(min)	0

Response\Fail->	AC Fail	Low Battery	Zone Tampers	False Code	Phone Line
Siren (OFF)	☐	☐	☐	☐	☐
Relay (OFF)	☐	☐	☐	☐	☐
Smoke (OFF)	☐	☐	☐	☐	☐
ON/OFF (OFF)	☐	☐	☐	☐	☐
ALARM (OFF)	☐	☐	☐	☐	☐
Exp.1 (OFF)	☐	☐	☐	☐	☐
Exp.2 (OFF)	☐	☐	☐	☐	☐
Exp.3 (OFF)	☐	☐	☐	☐	☐
Private Dialer (OFF)	☐	☐	☐	☐	☐
Central Station (OFF)	☑	☑	☑	☑	☑

Response\Fail->	AC Fail	Low Battery	Zone,Tampers	False Code	Phone Line
Siren (ON)	☐	☐	☐	☐	☐
Relay (ON)	☐	☐	☐	☐	☐
Smoke (ON)	☐	☐	☐	☐	☐
ON/OFF (ON)	☐	☐	☐	☐	☐
ALARM (ON)	☐	☐	☐	☐	☐
Exp.1 (ON)	☐	☐	☐	☐	☐
Exp.2 (ON)	☐	☐	☐	☐	☐
Exp.3 (ON)	☐	☐	☐	☐	☐
Private Dialer (ON)	☐	☐	☐	☐	☐
Central Station (ON)	☑	☑	☑	☑	☑

Zones(1)

Zone\Attrib->	Description	Type	Bypass	NO	24Hour	Home 1	Home 2	Entry Delay	Entry Follower
Zone 1	Zone 1	Alarm	☐	☐	☐	☑	☑	☑	☐
Zone 2	Zone 2	Alarm	☐	☐	☐	☑	☑	☐	☑
Zone 3	Zone 3	Alarm	☐	☐	☐	☑	☑	☐	☑
Zone 4	Zone 4	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 5	Zone 5	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 6	Zone 6	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 7	Zone 7	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 8	Zone 8	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 9	Zone 9	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 10	Zone 10	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 11	Zone 11	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 12	Zone 12	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 13	Zone 13	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 14	Zone 14	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 15	Zone 15	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 16	Zone 16	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 17	Zone 17	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 18	Zone 18	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 19	Zone 19	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 20	Zone 20	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 21	Zone 21	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 22	Zone 22	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 23	Zone 23	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 24	Zone 24	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 25	Zone 25	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 26	Zone 26	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 27	Zone 27	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 28	Zone 28	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 29	Zone 29	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 30	Zone 30	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 31	Zone 31	Alarm	☐	☐	☐	☑	☑	☐	☐
Zone 32	Zone 32	Alarm	☐	☐	☐	☑	☑	☐	☐

Zone\Attrib->	Use Second Delay	EOL	Pair	Double Knock	Bypass Enable	Chime
Zone 1	☐	☐	☐	☐	☑	☐
Zone 2	☐	☐	☐	☐	☑	☐
Zone 3	☐	☐	☐	☐	☑	☐
Zone 4	☐	☐	☐	☐	☑	☐
Zone 5	☐	☐	☐	☐	☑	☐
Zone 6	☐	☐	☐	☐	☑	☐
Zone 7	☐	☐	☐	☐	☑	☐
Zone 8	☐	☐	☐	☐	☑	☐
Zone 9	☐	☐	☐	☐	☑	☐
Zone 10	☐	☐	☐	☐	☑	☐
Zone 11	☐	☐	☐	☐	☑	☐
Zone 12	☐	☐	☐	☐	☑	☐
Zone 13	☐	☐	☐	☐	☑	☐
Zone 14	☐	☐	☐	☐	☑	☐
Zone 15	☐	☐	☐	☐	☑	☐
Zone 16	☐	☐	☐	☐	☑	☐
Zone 17	☐	☐	☐	☐	☑	☐
Zone 18	☐	☐	☐	☐	☑	☐
Zone 19	☐	☐	☐	☐	☑	☐

Zone\Attrib->	Use Second Delay	EOL	Pair	Double Knock	Bypass Enable	Chime
Zone 20	☐	☐	☐	☐	☑	☐
Zone 21	☐	☐	☐	☐	☑	☐
Zone 22	☐	☐	☐	☐	☑	☐
Zone 23	☐	☐	☐	☐	☑	☐
Zone 24	☐	☐	☐	☐	☑	☐
Zone 25	☐	☐	☐	☐	☑	☐
Zone 26	☐	☐	☐	☐	☑	☐
Zone 27	☐	☐	☐	☐	☑	☐
Zone 28	☐	☐	☐	☐	☑	☐
Zone 29	☐	☐	☐	☐	☑	☐
Zone 30	☐	☐	☐	☐	☑	☐
Zone 31	☐	☐	☐	☐	☑	☐
Zone 32	☐	☐	☐	☐	☑	☐

Zones(2)

Type\Response->	Sensitivity	Siren	Relay	Smoke	ON\OFF	ALARM	Exp.1	Exp.2	Exp.3	Private Dialer
Alarm	8	☑	☐	☐	☐	☑	☐	☐	☐	☑
Panic	8	☑	☐	☐	☐	☑	☐	☐	☐	☑
Fire	8	☑	☐	☑	☐	☐	☐	☐	☐	☑
Special Alarm 1	8	☑	☐	☐	☐	☐	☐	☐	☐	☑
Special Alarm 2	8	☑	☐	☐	☐	☐	☐	☐	☐	☑
Special Alarm 3	8	☑	☐	☐	☐	☐	☐	☐	☐	☑
Special Panic	8	☑	☐	☐	☐	☐	☐	☐	☐	☑
Special Fire	8	☑	☐	☑	☐	☐	☐	☐	☐	☑

Type\Response->	Second Siren Tone	Auto Bypass	Local In OFF	Audio Device
Alarm	☐	☐	☐	☐
Panic	☐	☐	☐	☐
Fire	☐	☐	☐	☐
Special Alarm 1	☐	☐	☐	☐
Special Alarm 2	☐	☐	☐	☐
Special Alarm 3	☐	☐	☐	☐
Special Panic	☐	☐	☐	☐
Special Fire	☐	☐	☐	☐

Zone\Part->	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Zone 1	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 2	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 3	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 4	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 5	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 6	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 7	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 8	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 9	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 10	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 11	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 12	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 13	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 14	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 15	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 16	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 17	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 18	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 19	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 20	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 21	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 22	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 23	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 24	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 25	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 26	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 27	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 28	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 29	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 30	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zone 31	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Zone/Part->	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Zone 32	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Phone Communication

No.	Phone Format	Phone Format(Ext)
1	0	0
2	0	0

Report\Station->	1	2
Alarms	☑	☑
Panic	☑	☑
Fire	☑	☑
Arm\Disarm	☐	☐
Failures	☑	☑
Periodical Tests	☐	☐
Remote Test	☐	☐
Installer Code Typing	☐	☐

GSM Exist	☐
Arm\Disarm As Alarms	☐
Account From Radio	☐
GSM Auto Test	☐

No.	Private Phone	Monitoring Station Phone	Callback Phone
1			
2			
3			
4			

	Phone Acount No.
Part.1	0
Part.2	0
Part.3	0
Part.4	0
Part.5	0
Part.6	0
Part.7	0
Part.8	0
Part.9	0
Part.10	0
Part.11	0
Part.12	0
Part.13	0
Part.14	0
Part.15	0
Part.16	0

No.	Zone Alarm	Restore
1	FF	FF
2	FF	FF
3	FF	FF
4	FF	FF
5	FF	FF
6	FF	FF
7	FF	FF
8	FF	FF
9	FF	FF
10	FF	FF
11	FF	FF
12	FF	FF
13	FF	FF
14	FF	FF
15	FF	FF
16	FF	FF

No	Zone Alarm	Restore
17	FF	FF
18	FF	FF
19	FF	FF
20	FF	FF
21	FF	FF
22	FF	FF
23	FF	FF
24	FF	FF
25	FF	FF
26	FF	FF
27	FF	FF
28	FF	FF
29	FF	FF
30	FF	FF
31	FF	FF
32	FF	FF

Tel Line Connected	☑
Bypass Dial Tone	☐
Line Check In ON	☐
Line Check In OFF	☐
Tone Dialing	☑
Answering Machine	☐
Speaking Unit	☐
Disable Remote Programming	☐
Disable Remote Disarming	☑
External Line	
GSM Prefix Number	
Number of Rings	10
Wait for Ack(sec)	20
Station Type	SINGLE
Auto Test By Phone(hrs)	0

AC Fail	FF
AC Restore	FF
Low Battery	FF
Battery Restore	FF
Tamper 1 Open	FF
Tamper 1 Close	FF
Tamper 2 Open	FF
Tamper 2 Close	FF
Phone Line Fail	FF
Phone Line Restore	FF
Power Fail	FF
Power Restore	FF
Arming	FF
Disarming	FF
Bypass	FF
Panic	FF
Test	FF
Fuse Failure	FF
Fuse Restore	FF
False Code	FF
Zones Failures	FF
Zones Failures Restore	FF

Radio Transmitter

Radio format	0
Transmissions No.	6
Auto Test By Radio(hrs)	0
Auto Test By Radio(min)	0

	Radio Acount No.
Part.1	0
Part.2	0
Part.3	0
Part.4	0
Part.5	0
Part.6	0
Part.7	0
Part.8	0
Part.9	0
Part.10	0

	Radio Acount No.
Part.11	0
Part.12	0
Part.13	0
Part.14	0
Part.15	0
Part.16	0

No.	Zone Alarm	Restore
1	FF	FF
2	FF	FF
3	FF	FF
4	FF	FF
5	FF	FF
6	FF	FF
7	FF	FF
8	FF	FF
9	FF	FF
10	FF	FF

No.	Zone Alarm	Restore
11	FF	FF
12	FF	FF
13	FF	FF
14	FF	FF
15	FF	FF
16	FF	FF

No	Zone Alarm	Restore
17	FF	FF
18	FF	FF
19	FF	FF
20	FF	FF
21	FF	FF
22	FF	FF
23	FF	FF
24	FF	FF
25	FF	FF
26	FF	FF
27	FF	FF
28	FF	FF
29	FF	FF
30	FF	FF
31	FF	FF
32	FF	FF

AC Fail	FF
AC Restore	FF
Low Battery	FF
Battery Restore	FF
Tamper 1 Open	FF
Tamper 1 Close	FF
Tamper 2 Open	FF
Tamper 2 Close	FF
Phone Line Fail	FF
Phone line Restore	FF
Power Fail	FF
Power Restore	FF
Arming	FF
Disarming	FF
Bypass	FF
Panic	FF
Test	FF
Fuse Fail	FF
Fuse Restore	FF
False Code	FF
Zones Failures	FF
Zones Failures Restore	FF

Outputs Card

	Part.1	Part.2	Part.3	Part.4	Part.5	Part.6	Part.7	Part.8	Part.9	Part.10	Part.11	Part.12	Part.13
Out.1	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Out.2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Out.3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Out.4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Out.5	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Out.6	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Out.7	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Out.8	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Part.14	Part.15	Part.16
Out.1	☐	☐	☐
Out.2	☐	☐	☐
Out.3	☐	☐	☐
Out.4	☐	☐	☐
Out.5	☐	☐	☐
Out.6	☐	☐	☐
Out.7	☐	☐	☐
Out.8	☐	☐	☐

	Polarity
Out.1	Negative
Out.2	Negative
Out.3	Negative
Out.4	Negative
Out.5	Negative
Out.6	Negative
Out.7	Negative
Out.8	Negative

Outputs Card Time(sec)	0

Users

Master	Short	Ambush	Relay	Installer
9999				1234

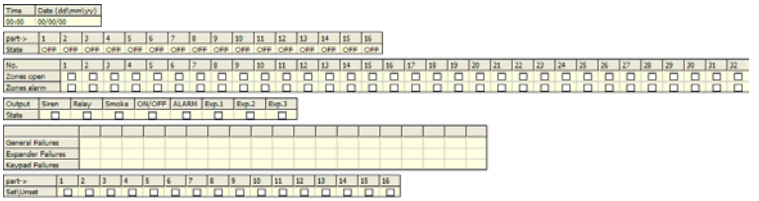
User\Attrib->	Name	Code	Time Start	Time Stop	Codes Menu	Telephones	Date & Time	View Log
User 1	User 1		00:00	23:59	☐	☐	☐	☐
User 2	User 2		00:00	23:59	☐	☐	☐	☐
User 3	User 3		00:00	23:59	☐	☐	☐	☐
User 4	User 4		00:00	23:59	☐	☐	☐	☐
User 5	User 5		00:00	23:59	☐	☐	☐	☐
User 6	User 6		00:00	23:59	☐	☐	☐	☐
User 7	User 7		00:00	23:59	☐	☐	☐	☐
User 8	User 8		00:00	23:59	☐	☐	☐	☐
User 9	User 9		00:00	23:59	☐	☐	☐	☐
User 10	User 10		00:00	23:59	☐	☐	☐	☐
User 11	User 11		00:00	23:59	☐	☐	☐	☐
User 12	User 12		00:00	23:59	☐	☐	☐	☐
User 13	User 13		00:00	23:59	☐	☐	☐	☐
User 14	User 14		00:00	23:59	☐	☐	☐	☐
User 15	User 15		00:00	23:59	☐	☐	☐	☐
User 16	User 16		00:00	23:59	☐	☐	☐	☐
User 17	User 17		00:00	23:59	☐	☐	☐	☐
User 18	User 18		00:00	23:59	☐	☐	☐	☐

User\Attrib->	Name	Code	Time Start	Time Stop	Codes Menu	Telephones	Date & Time	View Log
User 19	User 19		00:00	23:59	☐	☐	☐	☐
User 20	User 20		00:00	23:59	☐	☐	☐	☐
User 21	User 21		00:00	23:59	☐	☐	☐	☐
User 22	User 22		00:00	23:59	☐	☐	☐	☐
User 23	User 23		00:00	23:59	☐	☐	☐	☐
User 24	User 24		00:00	23:59	☐	☐	☐	☐

User\Attrib->	Zone Bypassing	Use any RKD	Auto Arming Menu
User 1	☐	☐	☐
User 2	☐	☐	☐
User 3	☐	☐	☐
User 4	☐	☐	☐
User 5	☐	☐	☐
User 6	☐	☐	☐
User 7	☐	☐	☐
User 8	☐	☐	☐
User 9	☐	☐	☐
User 10	☐	☐	☐
User 11	☐	☐	☐
User 12	☐	☐	☐
User 13	☐	☐	☐
User 14	☐	☐	☐
User 15	☐	☐	☐
User 16	☐	☐	☐
User 17	☐	☐	☐
User 18	☐	☐	☐
User 19	☐	☐	☐
User 20	☐	☐	☐
User 21	☐	☐	☐
User 22	☐	☐	☐
User 23	☐	☐	☐
User 24	☐	☐	☐

User\Part->	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
User 1	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 2	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 3	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 4	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 5	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 6	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 7	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 8	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 9	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 10	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 11	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 12	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 13	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 14	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 15	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 16	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 17	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 18	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 19	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 20	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 21	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 22	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 23	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
User 24	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Status


Time
Date (dd/mm/yy)
00:00
00/00/00
part->
Stats
OFF
No.
Zones open
Zones alarm
Output
Siren
Relay
Smoke
ON/OFF
ALARM
Exp.1
Exp.2
Exp.3
State
General Failures
Expander Failures
Keypad Failures
part->
Set/Unset

10.2 Central-Station Report Formats

10.2.1 Pulse Formats

RATE(PPS)	ACK	ERROR CONTROL	I.D. EVENT	A	B	NAME
10	1400	DOUBLE ROUND	3 – 1	93	15	ADEMCO SLOW
			3 - 2	92	15	
			4 - 1	93	143	
			4 - 2	92	143	
10	1400	CHECK SUM	3 – 1	93	79	
			3 - 2	92	79	
			4 - 1	93	207	
			4 - 2	92	207	
10	2300	DOUBLE ROUND	3 - 1	93	31	
			3 - 2	92	31	
			4 - 1	93	159	
			4 - 2	92	159	
10	2300	CHECK SUM	3 - 1	93	95	
			3 - 2	92	95	
			4 - 1	93	223	
			4 - 2	92	223	
14	1400	DOUBLE ROUND	3 - 1	85	15	SILENT MODE
			3 - 2	84	15	
			4 - 1	85	143	
			4 - 2	84	143	
14	1400	CHECK SUM	3 - 1	85	79	

RATE(PPS)	ACK	ERROR CONTROL	I.D. EVENT	A	B	NAME
			3 - 2	84	79	
			4 - 1	85	207	
			4 - 2	84	207	
14	2300	DOUBLE ROUND	3 - 1	85	31	
			3 - 2	84	31	
			4 - 1	85	159	
			4 - 2	84	159	
14	2300	CHECK SUM	3 - 1	85	95	
			3 - 2	84	95	
			4 - 1	85	223	
			4 - 2	84	223	
20	1400	DOUBLE ROUND	3 - 1	47	15	**FRANKLIN**
			3 - 2	46	15	
			4 - 1	47	143	
			4 - 2	46	143	
20	1400	CHECK SUM	3 - 1	47	79	
			3 - 2	46	79	
			4 - 1	47	207	
			4 - 2	46	207	
20	2300	DOUBLE ROUND	3 - 1	47	31	
			3 - 2	46	31	
			4 - 1	47	159	
			4 - 2	46	159	

RATE(PPS)	ACK	ERROR CONTROL	I.D. EVENT	A	B	NAME
20	2300	CHECK SUM	3 - 1	173	95	**UNIVERSAL**
			3 - 2	172	95	**HIGH-SPEED**
			4 - 1	173	223	
			4 – 2	172	223	
40	1400	DOUBLE ROUND	3 - 1	135	15	**RADIONICS**
			3 - 2	134	15	
			4 - 1	135	143	
			4 - 2	134	143	
40	1400	CHECK SUM	3 - 1	135	79	
			3 - 2	134	79	
			4 - 1	135	207	
			4 - 2	134	207	
40	2300	DOUBLE ROUND	3 - 1	135	31	
			3 - 2	134	31	
			4 - 1	135	159	
			4 - 2	134	159	
40	2300	CHECK SUM	3 - 1	135	95	
			3 - 2	134	95	
			4 - 1	135	223	
			4 - 2	134	223	

10.2.2 DTMF Formats

I.D. EVENT	A	B	I.D. EVENT	ERROR CONTROL	ACK	RATE (PPS)
	225	14	3 - 1			
	254	14	3 - 2			
	225	142	4 - 1			
	254	142	4 - 2			
	255	78	3 - 1	CHECK SUM	1400	
	254	78	3 - 2			
	255	206	4 - 1			
	254	206	4 - 2			
	255	30	3 - 1	DOUBLE ROUND	2300	
	254	30	3 - 2			
	255	158	4 - 1			
	254	158	4 - 2			
	255	94	3 - 1	CHECK SUM	2300	
	254	94	3 - 2			
	255	222	4 - 1			
	254	222	4 - 2			
	0	5		PAF	1400	
	0	21			2300	
	0	230	------	CONTACT ID		