



## Safety instructions for the installation and maintenance personnel

### WARNINGS!

Before the installation of the power supply, which will be connected to the mains, please read carefully and follow the basic safety instructions provided with this product.

- In accordance with the standards and regulations of each country, there are basic safety guidelines, which must also be strictly followed.
- Where the installer is to add or replace any peripheral or disconnect any cables, it is recommended that he/she does so only after disconnecting both the AC mains and the system's battery.
- Do not tamper with or disconnect any factory power supply wiring.
- Inform the end user of the safety precautions to be taken when operating this equipment.
- Keep or store these instructions for future use.

This being a permanent installation, the power supply **must be installed and connected to the power mains only by a qualified licensed electrician or electronics installer**. A qualified installer is one who has received the relevant training and has the necessary experience to allow him/her to identify risks and take appropriate measures to reduce the risks of injury to himself/herself and to others.

The power supply should be installed and used only indoors, in a safe environment, with low pollution and without frequent and significant overvoltage or interference.

### Copyright



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**To avoid the risk of fire, electric shock, and/or injury, the installer and the end-user should pay attention to the following:**

- **DO NOT** attempt to repair this product yourself. You may be exposed to dangerous voltage or other hazards if you open or remove the lid. Assign maintenance only to qualified persons. Never open the appliance yourself.
- Use only approved peripherals and accessories.
- **DO NOT** leave or place any items on top of the power supply box! The box is not designed to support extra weight when installed on the wall!
- **DO NOT** spill any liquids in the box.
- **DO NOT** touch the equipment and the wires connected to it during an electrical storm. Risk of electric shock!
- **NEVER** touch non-insulated cables or terminals unless the equipment has been disconnected from power!
- Make sure the cables are positioned so that accidents cannot occur. Connected cables must not be subjected to excessive mechanical stress.
- Contact your distributor and/or manufacturer for further clarification and/or answers to any questions you may have.

## Power supply specifications

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This power supply, depending on the settings selected during the installation process and the implementation of the instructions listed herein, allows you to create a **Grade 3** rating security system.

The power supply is compatible with European standard EN 50131-6: 2008 + A1: 2014

To support the design, installation, operation, and maintenance of alarm systems installed in buildings, the following regulatory documents should be consulted: CEI 79-3 and CEI CLC / TS 50131-7.

Depending on the country in which the power supply is installed, certified compliance with local laws and regulations may be required.

## Environmental conditions

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The power supply must not be installed outdoors and is suitable for operation under the following conditions:

- Operational Temperature: -10° to +50°C
- Relative humidity: less than 75% (non-condensing)
- Environmental Classification: Class II

## Information on the disposal of electrical and electronic equipment

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(Applicable in countries with differentiated waste collection systems)

The symbol of the crossed-out bin on the equipment or its packaging indicates that the product must be disposed of correctly at the end of its useful life and must never be disposed of with general household waste.

Therefore, the user must take end-of-life equipment to the appropriate place that is designated for the collection of electrical and electronic waste. As an

alternative to autonomous management of electrical and electronic waste, you can hand over the equipment you want to dispose of to a dealer when you buy new equipment of the same type. You are also entitled to take the small electronic waste with dimensions less than 25 cm to the physical premises of online retail stores with sales areas of at least 400 m<sup>2</sup>, free of charge and without any obligation to purchase.

The appropriate differentiated collection of waste for the subsequent recycling of the waste equipment, its treatment, and environmentally compatible disposal, contributes to the avoidance of possible negative effects on the environment and health and favors the reuse and/or recycling of the materials from which it is made.

## Introduction

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The PA-5 series power supplies, provide 12 – 14 V DC output to supply the peripherals connected to an alarm system (keypads, readers, zone expanders, etc.), if they are located at a distance from the control panel or when the panel's power supply is not sufficient. It can also be used to power any other 12V device. It is manufactured in three different types, which have the same number of outputs and the same capabilities and programming mode.

**PS 5U:** universal power supply

**PS 5SB:** network power supply, which **cooperates exclusively with S-PRO & AEOLUS panels**

**PS 5RS:** network power supply, which **cooperates exclusively with PHAETHON panels**

## Features

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- 4 AUX outputs to supply peripherals
- Each output is independent, supervised, and protected by an electronic fuse
- The current can be set at each output separately
- In case of overvoltage, short circuit, or overload of output, the circuit will cut off the specific output and it will be restored only after the cause of the problem has been eliminated
- **Pulse width modulation (PWM)**, to limit the maximum charge current to 400 or 700 mA, if the battery is fully discharged
- The output for charging the battery, has a short circuit and reverse battery polarity protection
- When the battery is connected in reverse polarity, the red LED on the board turns on
- It has a battery overvoltage protection circuit if the voltage at the power supply input rises above 14.5 V, and from full discharge if its voltage falls below 9.5 V
- On network power supplies, a continuous diagnostic check is performed and the panel is notified for a power loss, low battery voltage and short circuit or over current for each output separately
- In the event of a power outage, low battery voltage, and overcurrent or short-circuit of power output (AUX), the corresponding Fault output is activated
- Up to **4 PS 5SB** power supplies can be used with each **S-PRO** panel
- Up to **2 PS 5SB** power supplies can be used with each **AEOLUS** or **APOLLO** panel
- Up to **8 PS 5RS** power supplies can be used with each **PHAETHON** panel
- Address selection in **PS 5SB** power supplies is done via the integrated **dip Switch**, while in PS 5RS power supplies, it is done with the panel keypad, via the **RS-485 BUS**

- Power supplies can be configured easily and quickly **with local Downloading** from a computer, and network power supplies can be configured via the panel keypad
- Opening of the lid and detachment from the wall are Tamper protected and can be assigned to any panel zone
- Metal box with position for two **12V/7 Ah** batteries or one **12V/18 Ah** battery

## Technical data

TYPES OF POWER SUPPLIES	PS 5U	PS 5SB	PS 5RS
Power supply type	A		
Supply voltage at the Switching input	90-264 V AC 50/60 Hz		
Voltage at the power supply input	14.0 V DC		
Standby power consumption (power supply board)	40 mA		
Maximum AUX output voltage ripple	250 mV		
Number of AUX outputs	4		
Total power supply current (AUX and battery)	5.0 A		
Total AUX output current	4.4 A (4 x 1.1 A each output)		
AUX output voltage	13.8 V DC (min 10.0 - max 14.0 V DC)		
AUX output Fault Signal activation	< 10.0 V		
AUX output current*	Default: 1100 mA, Max: 1400 mA (per output)		
Output overvoltage protection at the input	> 14.5 V		
Battery type	Lead Acid 7.0 Ah or 18.0 Ah		
Battery charge voltage	13.8– 14.0 V DC		
Battery charge current	400 mA or 700 mA (selectable)		
Battery charging duration	24 hours (charge to 80%)		
Low battery voltage indicator	< 11.5 V		
Low battery voltage reset	> 12.0 V		
Problem with battery	< 10.0 V		
Battery discharge protection	≤ 9.5V		
Battery life	3 – 5 years		
Operating temperature	-10 to +55 oC		

Maximum humidity	75% (non-condensing)
IP protection	30
Security grade	Grade 3
Panel Box Dimensions (WxHxD)	31x30x8
Weight (without battery)	

## Indicator LEDs

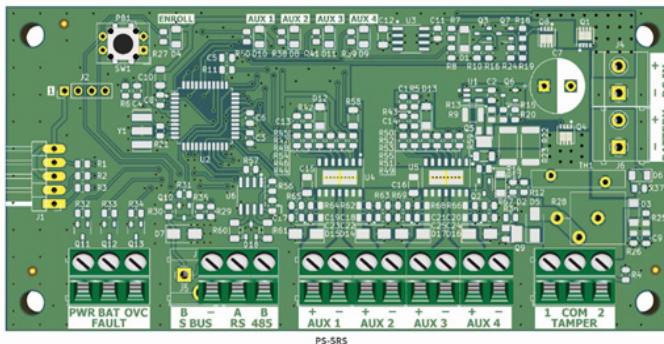
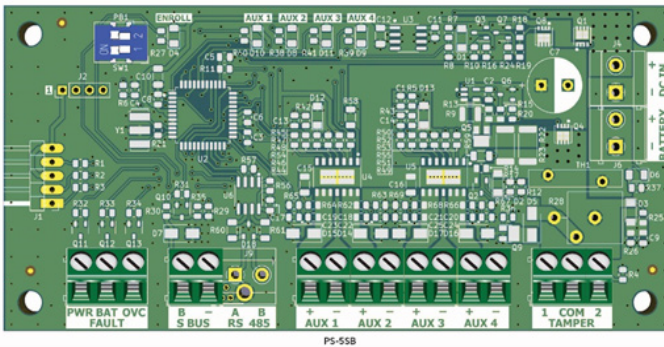
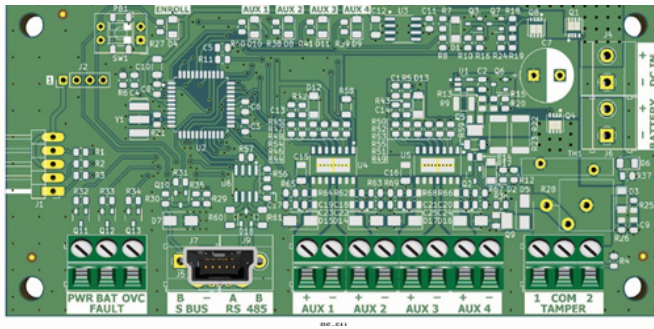
### FACE INDICATOR LEDs

<p><b>POWER</b> <b>Green</b></p>	<p><b>On:</b> The device is normally supplied with <b>230 V AC</b> from the mains.</p> <p><b>Flashes slowly</b> when powered from the mains, but the voltage at the output of the switching power supply is greater than 14.5 V DC.</p> <p><b>Flashes quickly</b> when powered from the mains, but the voltage at the output of the switching power supply is less than 12.7 V DC.</p> <p><b>Flashes intermittently</b> (lights up briefly for 0.1 sec and turns off for 2 sec) when not powered from the mains, the mains but the power supply and connected devices are still powered by the power supply battery.</p> <p><b>Off:</b> No power from the mains or the battery.</p>
<p><b>BATTERY</b> <b>Red</b></p>	<p><b>On:</b> When the battery of the power supply has a problem (Fail Battery).</p> <p><b>Flashes quickly:</b> When there is no battery in the power supply.</p> <p><b>Flashes slowly:</b> When the battery voltage is below <b>11.5 V DC (Low Battery)</b>.</p> <p><b>Off:</b> When the battery voltage is normal (<b>over 12.0 V DC</b>).</p>
<p><b>FAULT</b> <b>Yellow</b></p>	<p><b>On:</b> when there is overcurrent or one of the AUX outputs is shorted.</p> <p><b>Flashing:</b> when an <b>AUX</b> output is OFF.</p> <p><b>On and then flashes:</b> When one <b>AUX</b> output is shorted and, at the same time, one AUX output is OFF.</p>

## BOARD INDICATOR LEDs

AUX 1/2/3/4	On when there is overcurrent or the respective <b>AUX</b> output is shorted.
LED D 6 BATTERY	Located next to the battery connection terminal and lights up if the battery cables are connected the wrong way.

## Diagrams



## Connection points index

<p><b>PWR BAT OVC FAULT</b></p>	<p><b>FAULT outputs</b> Open collector outputs (<b>O.C.</b>). They become conductive (revert to <b>0</b>) when there is a power outage problem (<b>PWR</b>), a battery problem or low voltage (<b>BAT</b>), and an over current at an output (<b>OVC – OVer Current</b>).</p>
<p><b>B - S BUS</b></p>	<p><b>S BUS communication bus output</b> (only available on <b>PS 5SB</b> power supply) This output is connected to the corresponding Bus and to - on the S PRO or AELOUS panels.</p>
<p><b>- A B RS 485</b></p>	<p><b>RS 485 communication bus output</b> (only available on <b>PS 5RS</b> power supply) This output is connected to the corresponding bus connector strips of the PHAETHON panel.</p>
<p><b>+ AUX 1 - + AUX 2 - + AUX 3 - + AUX 4 -</b></p>	<p><b>Outputs to supply detectors or other devices</b> These outputs are used to supply detectors and other system peripherals. Each output has <b>its own electronic</b> over current or short-circuit protection.</p>
<p><b>1 COM 2 TAMPER</b></p>	<p><b>Inputs for connecting power supply's Tamper wires.</b> These are used to connect the power supply's Tampers in series. Also, in the PS 5U power supply, the wires that will connect the power supply's Tampers to a 24-hour zone of the panel connect in parallel to positions 1 and 2.</p>
<p><b>- BAT +</b></p>	<p><b>Output for battery connection</b> These are used to connect the battery wires (included in the power supply package). Beware of the correct battery polarity. In case of an incorrect connection, the red LED indicator next to the battery connector strip lights up. Disconnect the battery and connect it to the correct polarity.</p>
<p><b>- DC IN +</b></p>	<p><b>Power supply voltage input</b> It is on the right-hand side of the board and is used to connect the output of the Switching Power Supply, which must be <b>14.0 V DC</b>.</p>

## Installation and connection

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### Caution!

- NEVER install this equipment during a storm.
- The power supply must be connected to the power mains by a licensed electrician or electronics installer.
- DO NOT connect the power supply to electrical outlets controlled by wall switches or automatic timers.
- DO NOT connect the power supply to the same electrical circuit with other large appliances (radiators, air conditioners, cookers and fridges).
- DO NOT install the power supply near water (e.g. bathtub, kitchen /laundry sink, damp basement, or pool).
- DO NOT install the power supply in areas where there is a risk of explosion.
- AVOID interference from other devices.
- If you need to replace the switching power supply, use only the power supply supplied by the manufacturer. The use of unauthorized power supplies may cause damage.

### Installation

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For proper installation of the power supply, it is recommended to position it halfway between the panel and peripherals or close to a point where there is a high concentration of peripherals so that any power drop caused by cables can be effectively compensated. In general, the installation distance from the panel depends on the total consumption of the connected devices that will be connected to it and the type of cables that will be used to connect them. The type of cable to be used can affect the voltage that will reach the peripherals as well as the unimpeded transmission of signals through the BUS conductors, in PS-5SB and PS-5RS network power supplies.

It is therefore recommended to position the power supply at a point where current sinking by **the peripherals will not bring the supply voltage below 12.5 V**. Also, the power supply should be positioned in a secure place **inside the facility**, accessible only by authorized occupants.

- Choose a surface free of vibration, excessive heat, moisture, vapor, chemicals or dust, close to a 220 V AC outlet and **more than 1.5 meters from the floor**, so that it is not easily accessible.
- Using the base of the box, mark the points on the wall where you will drill the fixing holes for the power supply, ensuring that they are not near electrical wiring, plumbing, gas pipes, etc.
- Drill the holes with a 6mm drill bit.
- Place the existing brackets on the wall and fix the power supply with the screws.
- Install all cables so that there is no excessive mechanical stress that could lead to accidents.
- Pass the power cables through the cable holes [A]. Power to the power supply must be supplied from an outlet or via a dedicated line straight from the electrical panel of the room and should be protected by an **independent circuit breaker** (10A max), conforming to safety standards. The circuit breaker **shall also be used as an ON - OFF switch** if you wish to immediately cut off the power supply.
- Pass the cables of all the peripherals that you will supply from the power supply through the cable holes [B] and make sure they do not come into contact with high-voltage cables




or hazardous points.

- The PS-5SB and PS-5RS power supplies, like all Sigma network devices to be used in the installation, should be connected to the control panel via a 4-wire shielded cable ( $2 \times 0.50 + 2 \times 0.22 \text{ mm}^2$  or  $2 \times 0.75 + 2 \times 0.22 \text{ mm}^2$ ).  
**Caution!** The cable shield should be connected to a ground terminal (or GND) **only on the control panel side** and should be present along the entire length of the BUS cable, without interruption and without connecting to the ground on the other side.
- Using plastic cable ties, bring the cables together and fasten them to the metal hooks located at the base of the box.

## Connection

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- Connect the power cables to the appropriate terminals on the Switching Power Supply, following the instructions on the label on the top side of the Switching Power Supply. For a safety standards compatible installation, the phase cable must be connected to the “L” terminal, the neutral cable to the “N” terminal and the ground cable to the terminal 
- **Do not forget to connect the grounding system of the room** to the grounding terminal in the power supply. **The use of grounding is mandatory by law, for safety reasons** (electric shock avoidance) and should comply with all safety standards and applicable laws of the country. In addition, the correct grounding protects, to a large extent, the power supply’s electronic components from lightning, overvoltage and electrostatic discharges in general. Damage to the power supply **due to failure to use proper grounding will void the warranty.**
- Connect the devices you want to power to the **AUX** outputs of the power supply, ensuring correct polarity.
- Connect, whichever of the **FAULT** outputs you want, to zones of the panel or to remote LEDs, through a **2.2 kOhm** resistance. These are open collector (**O.C.**) outputs, which become conductive (i.e. revert to **0 V**) when there is a power outage problem (**PWR**), a battery problem or low voltage (**BAT**) or an output short circuit, overcurrent (**OVF- Over Current**) and can give a maximum current of **300 mA**.
- Connect the power supply’s Tamper to the “**TAMPER**” connector strip terminals in series, to positions **1 COM 2**. In positions 1 and 2 of the “**TAMPER**” connector strip in **PS 5U** power supplies, apart from the Tamper wires, also connect the wires of a 24-hour zone of the panel.
- In **PS 5SB** power supplies, connect the “**B**” of the power supply’s BUS to the “**B**” of the panel’s **S BUS** and the “-” of the power supply to the “-” of the panel.
- In **PS 5RS** power supplies, connect the “-”, “**A**” and “**B**” of the power supply’s **RS 485** to the corresponding “-”, “**A**” and “**B**” of the panel’s **RS 485**.
- After completion of installation, the supply voltage to the power supply (**90 - 230 V AC**).
- Finally, connect the battery, insert the lid and secure it with the screws provided.

## Setting the battery voltage

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The voltage for charging the battery is set to **13.8 V DC**. If it needs to be reset, insert the terminals of a voltmeter into the **+V** and **- V** outputs of the switching power supply, and using the potentiometer, set the voltage to **14.0 V DC**.

**Caution!** When the battery is not connected to the power supply, the voltage at the terminals of the cables to which it is connected is less than **2.0 V DC**.

### Notes:

- The power supply has a reverse battery polarity connection indicator and protection. When the battery is connected in reverse polarity, the red LED on the right-hand side of the board lights up. Disconnect the battery immediately and connect it to the correct polarity.
- **It is recommended** to replace the battery every **three (3) years!**
- **The battery is not included in the packaging.**

## Dynamic battery test

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The lead battery, which will be used in the power supply, is the secondary power source that supplies the system when there is an outage of the main power source (**90 - 230V~ 50Hz**). Once supplied with voltage, the power supply monitors the battery status, charges it and performs a dynamic check, as follows:

Every 5 minutes, it cuts off the battery power from the mains for 1 second and feeds an ohmic charge from the battery, thus simulating the power demand. If, during the test, it detects a voltage less than **11.5V**, it activates the Low Battery output and the **“Battery”** LED blinks slowly, while if the voltage is less than **10. 0 V DC**, the **“Battery”** LED stays on.

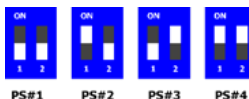
In addition, in case of low battery voltage and voltage restoration, network power supplies will send the “Low Battery” and “Low Battery Restore” events respectively to the panel and to the Central Monitoring Station, if the panel is connected to a Central Monitoring Station, as well as the “Fail Battery” and “Fail Battery Restore” events, in case of battery disconnection or damage and restoration, when the battery voltage again exceeds **11.5 V**.

## Addressing PS 5SB and PS 5RS network power supplies

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If you use more than one **PS 5SB** or **PS 5RS** power supply with a panel, for them to work with the respective panel you will have to assign a different address to each power supply. Specifically:

- To connect more than one PS 5SB power supply to an S PRO, AEOLUS or APOLLO panel, you will need to select a different address for each power supply using the dip switches on the board, as shown in the following image:



- To enroll the PS 5RS power supplies in the PHAETHON panel, use the “ENROLL” button on the power supply board and follow the instructions in the corresponding section of the panel instructions.

## Programming PS 5SB and PS 5RS network power supplies

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The programming you need to make relates to:

- The number of power outputs
- The current per power output
- Power outage checks and notification delay time
- Tamper programming

### Programming power supplies using a computer

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#### A. Programming PS 5U power supplies

Connect the computer to the mini USB input, located on the board, inside the power supply. Then, using the S-Load software provided for free, you can program or control the power supply's functions, such as battery charging current, maximum current of each AUX output, as well as deactivate or reactivate any AUX output.

#### B. Programming PS 5SB and PS 5RS network power supplies

In both of these power supplies, programming is done via the Bus and S-Load software. In this case, as well, you can program the battery charging current and the current of each AUX output, program the notification delay in case of a power outage and deactivate or reactivate some AUX output or the Tamperers.

### Programming network power supplies from the keypad

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You can program the parameters of the network power supplies using the keypad on the table, following the procedure below:

- From the system home display, press the [▼] arrow key successively and navigate to the display that reads:  
**[INSTALLER PROGRAMMING]**
- Press [ENTER]. The keypad display will display:  
**[TYPE CODE AND ENTER]**
- Enter the installer code and press [ENTER]. The following message will be displayed on the keypad:  
**[PLEASE WAIT...]** and immediately after the indication:  
**[KEYPAD SETTINGS]**
- Press the [▼] arrow key successively and the following menu will be displayed:  
**[PERIPHERAL PROGRAMMING]**
- Press [ENTER]. The following menu will be displayed:  
**[RFID READER PROGRAMMING]**
- Press the [▼] arrow key successively and navigate to the following menu:  
**[BUS POWER SUPPLY PROGRAMMING]**

- Press **[ENTER]**. The following menu will be displayed:  
**[POWER SUPPLY: PS#1]**
  - Enter the number of the power supply whose parameters you want to program (1-4 or 1-8, depending on the power supply type) and press **[ENTER]**. The following menu will be displayed, showing the four power supply outputs, with the symbol # below the number of each output, meaning that all outputs are active (factory default programming):  
**OUTPUTS: 1 2 3 4**  
**IN USE: # # # #**  
If you want to disable some outputs, e.g. outputs 2, and 4, then
  - Press **[2]** and **[4]**. The next display will appear, with # only below the number of active exits  
**1 and 3:**  
**OUTPUTS: 1 2 3 4**  
**IN USE: # #**
  - Press **[ENTER]**. The keypad display will display:  
**[OUTPUT: 1 //CURRENT: 1100 mA]**  
The maximum current can be adjusted independently for each output (from 0 - 1.5 A), but the total current of the four outputs cannot exceed 4.4 A. Therefore, you can get more current from one output, reducing the current of another output accordingly, or connect two or more outputs in parallel for more current. Specifically:  
To reduce the current of any output, e.g. if you want it to provide up to 250 mA,
  - Enter: **[2] [5] [0]**. The keypad display will display:  
**[OUTPUT 1: CURRENT: 250 mA]**
  - Press **[ENTER]**. The keypad display will display:  
**[OUTPUT 3: CURRENT: 1100 mA]**  
To increase the current of the output, e.g. if you want it to provide up to 1250 mA,
  - Enter: **[1] [2] [5] [0]**. The keypad display will display:  
**[OUTPUT 3: CURRENT: 1250 mA]**
  - Press **[ENTER]**. The keypad display will display:  
**[BATTERY // CHARGE CURRENT: 400mA]**  
If you use two batteries or one 18 Ah battery to charge faster, then you will need to increase the charge current to 800 mA.
  - Using the **[▼]** or **[□]** arrows select:  
**[BATTERY // CHARGE CURRENT: 800mA]** and
  - Press **[ENTER]**. The keypad display will display:  
**[AC POWER LOSS CHECK: YES]**  
If you want to perform a power loss check on this power supply and notify the Central Monitoring Station when a power outage occurs, then
  - Press **[ENTER]**. The following menu will be displayed:  
**[NOTIFICATION // DELAY: 30 min]**
- Notification delay** is the time between the power outage and the time that the event will be sent to the Central Monitoring Station and can be set from 00 to 99 minutes. If you set the delay for zero (**00**), then the event reference code will be sent to the Central Monitoring Station immediately.
- To change the power outage notification delay time, enter the delay time you want (**from 1 – 99 minutes**) and press **[ENTER]**.  
However, if you do not want the Central Monitoring Station to be notified about the power loss, then, navigate to the menu:  
**[AC POWER CHECK: YES]**

- Use the [▼] or [□] arrows to select:  
**[AC POWER CHECK: NO]** and
- Press [ENTER]. On the keypad the following menu will be displayed:  
**[TAMPER PS #1: // ON]**
- Press [ENTER] if you want to keep the Tamper on for this power supply, and to deactivate it use the [▼] or [□] arrows on the display:  
**[TAMPER PS #1: // OFF]** and
- Press [ENTER]. The keypad display will display:  
**[SAVE CHANGES?]**
- Press [ENTER] again to save the settings. On the keypad display the following message will appear:  
**[DONE!]**  
and, immediately after that, if entered in the panel's memory, the next power supply will be displayed, e.g.:  
**[POWER SUPPLY: PS#2]**  
which you can configure using the same process
- ▶ To exit this process, press [ESC].

## Notes

The following notes refer only to network power supplies:

- You can program the network power supplies from the panel's keypad as well, using the process described in this chapter, even without connecting them to the panel. Once the power supplies are connected to the panel, they will be immediately updated with all the settings performed.
- Two minutes after a power outage, the buzzer will sound and "POWER LOSS //POWER SUPPLY # 1" will appear on the keypad display for one minute, regardless of the delay you have set for notifications to Central Monitoring Station.
- If the power loss lasts less than the time you plan to set, then the event will not be recorded in the memory and there will be no notification of the outage to the Central Monitoring Station.

## Maintenance

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To ensure the proper operation of the power supply and to make the installation compatible with the safety specifications, you should observe the following:

- Every six months, check and adjust, if necessary, the charge voltage of batteries and AUX outputs.
- Also, every six months, in addition to the periodic operation checks of the installation that the system's user must perform, you must also check the proper operation of all devices powered by the power supply (PIR detectors, sirens, glass break detectors, etc.)
- The batteries of the power supply should be replaced every three years.

## Warranty

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Thank you for your preference for our products, which have been designed to offer safety and security for many years. Before being put to market, all our devices have undergone multiple operation tests and we guarantee the original purchaser that, under normal use, this product is free from defects in materials and workmanship.

Since Sigma Technology does not directly install this product and because this product may be used with other equipment not approved by Sigma Technology, Sigma Technology does not guarantee against the loss of quality, performance downgrade of this product, or any damage that may result from the use of products, parts or other replaceable materials (such as consumables) that are not manufactured or recommended by Sigma Technology.

The device is covered by a **6 (SIX) year warranty** when a valid proof of purchase can be presented. It should be clarified that, under this warranty, the obligation and **liability of the company are expressly limited to the repair of the device** (labor and parts) free of charge or **replacement, at the Seller's option**, in case **the failure is due to device fault** or any material that does not meet the specifications. Sigma Technology will not, under any circumstances, be liable to the purchaser or any other person for any **loss, destruction or injury, or damage** whether direct or indirect or consequential or incidental, including, without limitation, any loss of profit, stolen goods or claims of any other party, caused by failure of the device to function, as a result of faulty parts or due to wrong or improper installation or use of this product.

### **Warranty Limitations:**

The warranty **does not cover the cost of transportation** and packaging of the device to and from Sigma Technology Service. It also **does not cover the damage caused to the device by improper maintenance or negligence, incorrect connection, mishandling, flooding, lightning, vandalism and, in general, by external factors** as well as by damage due to normal wear and tear.

Improper use and use for purposes other than those mentioned in this manual void the warranty.

Furthermore, **any intervention to the device by a non-authorized installer shall immediately void the warranty.**

**Note that the installation of this Product must be carried out by specialized persons and the company bears no responsibility for the proper installation and operation of the device and the security system as a whole; this responsibility lies exclusively with the installer.**

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