

Pyronix PCX/AM078-S0

Pyronix PCX Hybrid Control Panel User Manual

MODEL: PCX/AM078-S0

1. Introduction

The Pyronix PCX/AM078-S0 is a sophisticated hybrid control panel designed for advanced security and surveillance systems. This panel supports up to 78 zones, offering flexible configuration for various security needs in residential and commercial environments. It integrates both wired and wireless security devices, providing a robust and scalable solution for comprehensive protection. This manual provides essential information for the proper installation, operation, and maintenance of your PCX Hybrid Control Panel.

2. Safety Information

Important: Installation and servicing of this equipment must only be performed by qualified security professionals in accordance with all local and national electrical codes and regulations. Failure to comply may result in electric shock, fire, or damage to the equipment.

- Always disconnect mains power before performing any installation, wiring, or maintenance.
- Ensure proper grounding of the control panel.
- Use only specified power sources and fuses. Refer to the 'Specifications' section for details.
- Do not expose the unit to moisture, extreme temperatures, or direct sunlight.
- Keep the control panel away from sources of electromagnetic interference.

3. Product Overview

The Pyronix PCX Hybrid Control Panel is housed in a durable enclosure, designed for secure internal component housing and easy access for wiring. The main circuit board (PCB) is the central processing unit, managing all connected security

devices and system functions.

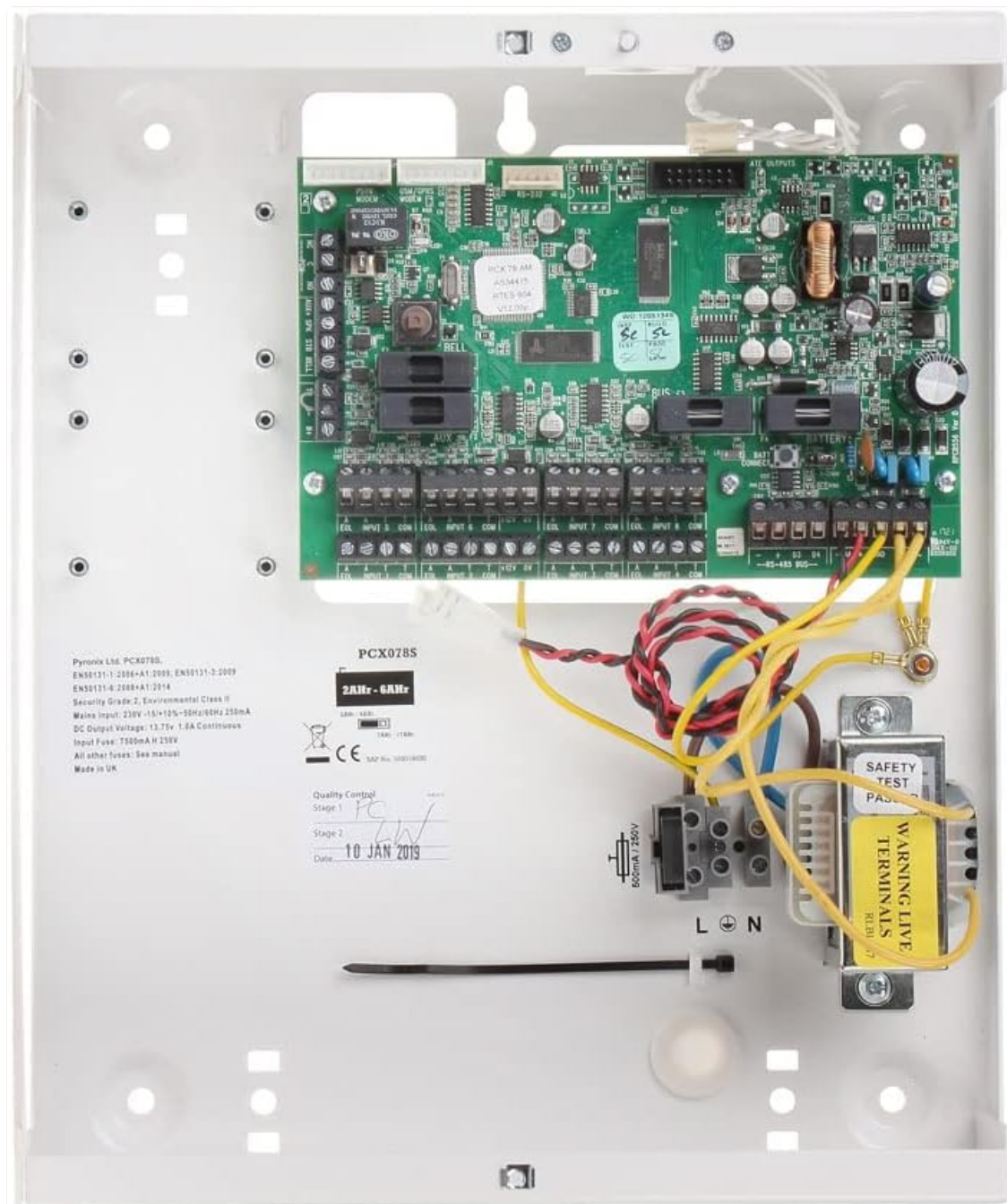


Figure 3.1: Internal Components of the PCX Hybrid Control Panel

This image displays the internal layout of the Pyronix PCX Hybrid Control Panel. Key components include the green main circuit board with various input/output terminals, a transformer for power supply, and internal wiring. Labels such as 'PCX078S', 'SAFETY TEST', and 'WARNING LIVE TERMINALS' are visible, indicating specific parts and safety warnings. The panel is designed for secure and organized internal component housing.

Key internal components include:

- **Main Circuit Board (PCB):** The core of the system, featuring microprocessors, memory, and communication interfaces.
- **Terminal Blocks:** Clearly labeled connections for zones, power, communication, and peripheral devices.
- **Power Supply Unit:** Includes a transformer and associated circuitry for converting mains power and charging the backup battery.
- **Battery Terminals:** For connecting the backup battery (typically 12V, 2Ah-6Ah as indicated on the panel).
- **Fuses:** Protective devices for various circuits, including mains input and auxiliary power.

4. Installation

Professional installation is highly recommended for the Pyronix PCX Hybrid Control Panel to ensure optimal performance and compliance with security standards.

4.1 Mounting the Panel

1. Select a secure, dry, and easily accessible location, away from direct sunlight and extreme temperatures.
2. Mark the mounting points on the wall using the panel's pre-drilled holes as a template.
3. Drill appropriate holes and insert wall plugs if necessary.
4. Securely mount the panel to the wall using suitable screws.

4.2 Wiring Connections

All wiring must be performed with mains power disconnected. Refer to the internal labels and the full installation manual for detailed wiring diagrams.

- **Mains Power (L, N):** Connect the 230V AC mains supply to the designated L (Live) and N (Neutral) terminals. Ensure proper earthing.
- **Battery:** Connect a 12V backup battery (2Ah-6Ah recommended) to the battery terminals, observing polarity.
- **Zones:** Connect wired detectors (PIRs, door contacts, etc.) to the numbered zone input terminals.
- **Outputs (ATE OUTPUTS, BELL, AUX):** Connect sirens, strobes, and other auxiliary devices to the respective output terminals.
- **Communication:** Connect communication modules (e.g., for remote monitoring) to the dedicated communication ports (e.g., RS-232, modem).

4.3 Initial Power-Up and Configuration

After all wiring is complete and checked, connect the mains power. The panel will perform a self-test. Follow the on-screen prompts or refer to the detailed programming manual for initial system configuration, including setting up user codes, zone types, and communication settings.

5. Operation

The PCX Hybrid Control Panel is operated via a connected keypad. Basic operations include arming, disarming, and bypassing zones.

5.1 Arming the System

To arm the system, enter your user code on the keypad. The system will indicate its armed status, typically with an LED indicator or a message on the keypad display. Different arming modes (e.g., Full Arm, Part Arm) may be available depending on your system configuration.

5.2 Disarming the System

To disarm the system, enter your user code on the keypad. The system will indicate that it is disarmed. If an alarm has been triggered, disarming will silence the alarm and reset the system.

5.3 Bypassing Zones

If a specific zone needs to be temporarily excluded from the armed state (e.g., for maintenance or if a sensor is faulty), it can be bypassed. Consult your keypad's specific instructions for bypassing zones, which typically involves entering a code and the zone number.

6. Maintenance

Regular maintenance ensures the continued reliability and performance of your security system.

- **Battery Check:** The backup battery should be tested annually by a professional. Replace the battery every 3-5 years, or sooner if it fails to hold a charge.
- **System Test:** Periodically test all sensors, sirens, and communication paths to ensure they are functioning correctly.
- **Cleaning:** Keep the control panel and keypads clean and free from dust. Use a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Firmware Updates:** Consult with your installer for information on available firmware updates, which can improve system performance and add new features.

7. Troubleshooting

This section addresses common issues you might encounter with your PCX Hybrid Control Panel. For complex problems, contact your security professional.

- **System Not Arming:** Check if any zones are open (e.g., door/window left ajar). The keypad display will usually indicate which zone is preventing arming. Bypass the faulty zone if necessary.
- **Low Battery Warning:** This indicates the backup battery is low or failing. Contact your installer for battery replacement.
- **Power Failure Indication:** If the mains power is disconnected, the system will run on battery backup. Restore mains power. If the issue persists, check the mains fuse.
- **False Alarms:** Identify the zone causing the false alarm. This could be due to a faulty sensor, environmental factors (e.g., drafts, pets), or improper installation.
- **Keypad Not Responding:** Check the keypad's power and communication connections to the main panel.

8. Specifications

Feature	Specification
Model	PCX/AM078-S0 (PCX078S)
Maximum Zones	78

Standards Compliance	EN50131-1:2006+A1:2009, EN50131-3:2009, EN50131-4:2008+A1:2014
Security Grade	Grade 2
Environmental Class	II
Mains Input	230V -15%+10% - 50Hz, 150mA
DC Output Voltage	13.75V, 1.8A Continuous
Input Fuse	T500mA H 250V
Manufactured In	UK
Quality Control Date	10 JAN 2019 (as per internal label)

9. Warranty and Support

For warranty information, please refer to the terms and conditions provided by your point of purchase or the official Pyronix website. Keep your proof of purchase for any warranty claims.

For technical support, troubleshooting assistance beyond this manual, or professional servicing, please contact your authorized Pyronix installer or the Dieffematic customer support team. Do not attempt to repair the control panel yourself, as this may void the warranty and pose safety risks.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question