

Pro-Watch 5000

Enclosure

PW5K2ENC1/PW5K2ENC2

PW5K2ENC1E/PW5K2ENC2E

Installation Guide

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Compliance

To obtain applicable EU compliance Declaration of Conformities for this product, please refer to our website, <http://www.security.honeywell.com/hsce/international/index.html>. For any additional information regarding the compliance of this product to any EU-specific requirements, please contact:

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This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB- 003 du Canada

Ordering Information

Please contact your local Honeywell Integrated Security representative or visit us on the web at <http://www.honeywellaccess.com/> for information about ordering.

Feedback

Honeywell Integrated Security appreciates your comments about this manual. Please visit us on the web at <http://www.honeywellaccess.com/> to post your comments.

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Notices

Warnings and Cautions

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), Canadian Electrical Code, Part I (CSA C22.1) Safety Standard for Electrical Installations, local codes, and the authorities having jurisdiction.

Before Installation



Warning: Before installation, **TURN OFF** the external circuit breaker which supplies power to the system.

Before connecting the device to the power supply, verify that the output voltage is within specifications of the power supply.

Do not apply power to the system until **after** the installation has been completed. Personal injury or death could occur, and the equipment could be damaged beyond repair if this precaution is not observed!



Fire Safety and Liability Notice

Not Evaluated by UL for fire, life safety, or burglary applications.

Warning: Never connect card readers to any critical entry, exit door, barrier, elevator or gate without providing **an alternative exit** in accordance with all fire and life safety codes pertinent to the installation. These fire and safety codes vary from city to city and you must get approval from local fire officials whenever using an electronic product to control a door or other barrier. Use of egress buttons, for example, may be illegal in some cities. In most applications, single action exit without prior knowledge of what to do is a life safety requirement. Always make certain that any required approvals are obtained in writing. **DO NOT ACCEPT VERBAL APPROVALS, THEY ARE NOT VALID.**

Honeywell never recommends using the PW-5000 or related products as a primary warning or monitoring system. Primary warning or monitoring systems should always meet local fire and safety code requirements. The installer must also test the system on a regular basis by instructing the end user in appropriate daily testing procedures. Failure to test a system regularly could make installer liable for damages to the end user if a problem occurs.

Earth Grounding



Warning: **EARTH** ground all enclosures for proper installation.

EARTH ground can be obtained through the power supply cord or by grounding the cabinet, **BUT NOT BOTH!**

Use Suppressors



Warning: Use suppressors on all door strikes. Use S-4 suppressors for installation. Honeywell recommends only DC strikes.

Damage During Shipment



Caution: IF ANY DAMAGE TO THE SHIPMENT IS NOTICED, A CLAIM MUST BE FILED WITH THE RESPONSIBLE COMMERCIAL CARRIER.

Electrostatic Discharge



Caution: Electrostatic discharge (ESD) can damage CMOS integrated circuits and modules.

To prevent damage always follow these procedures:

- Use static shield packaging and containers to transport all electronic components, including completed reader assemblies.
- Handle all ESD sensitive components at an approved static-controlled workstation. These workstations consist of a desk mat, floor mat and an ESD wrist strap. Workstations are available from various vendors.



Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules when wired using metal conduit for the cabling external to the enclosure. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the installation and user guides, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference that will require correction at the user's expense.



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Note: The installation and wiring of the PW5K2ENC1/PW5K2ENC2/PW5K2ENC1E and PW5K2ENC2E enclosures must comply with NFPA 70 requirements.

Disclaimer – Product Liability; Mutual Indemnification

If a Customer receives a claim that a Product or any component thereof has caused personal injury or damage to the property of others, Customer shall immediately notify Honeywell in writing of all such claims. Honeywell shall defend or settle such claims and shall indemnify and hold Customer harmless for any costs or damages including reasonable attorneys' fees which Customer may be required to pay as a result of the defective Product or the negligence of Honeywell, its agents, or its employees.

Customer shall hold harmless and indemnify Honeywell from and against all claims, demands, losses and liability arising out of damage to property or injury to persons occasioned by or in connection with the acts or omissions of Customer and its agents and employees, and from and against all claims, demands, losses and liability for costs of fees, including reasonable attorneys' fees, in connection therewith.

Unpacking Procedure



Caution: If any damage to the shipment is noticed before unpacking, a claim must be filed with the commercial carrier.

All containers should be opened and unpacked carefully in order to prevent damage to the contents.

Follow these steps to unpack equipment in preparation for installation:

1. Open the container and remove the unit(s) and all packing material. Retain the container and all the packing materials. They may be used again for reshipment of the equipment, if needed.
2. Inspect the contents for shortage. If items are missing, contact the order entry department at 1-800-323-4576 Option-1.
3. Visually check the contents. If you see any damage, do the following:
 - a. If shipping has caused damage to the unit, a claim must be filed with the commercial carrier.
 - b. If any other defect is apparent, call for a return authorization.

Shipping Instructions

To ship equipment back to Honeywell:

1. Contact the customer service department at 1-800-323-4576 before returning the equipment. When you call, please have available:
 - A description of the problem or the reason you are returning the equipment.
 - Your original purchase order number, invoice number and if the unit is still under warranty.
 - A new purchase order number if the unit is not under warranty.

2. From the customer service department, obtain the **Return Authorization Number (RMA)**.
3. Show the RMA number on all packages shipped. Packages that are not marked with an RMA number will be refused at the factory and returned to you **COD**.
4. Carefully pack the equipment for shipment. Use the original packing material whenever possible.

Limited Warranty

All Products sold or licensed by Honeywell include a **warranty registration card** which must be completed and returned to Honeywell by or on behalf of the end user in order for Honeywell to provide warranty service, repair, credit or exchange. All warranty work shall be handled through Customer which shall notify Honeywell and apply for a Return Merchandise Authorization (RMA) number prior to returning any Product for service, repair, credit or exchange. Honeywell warrants that its Products shall be free from defects in materials and workmanship for a period of two years from the date of shipment of the Product to Customer. The warranty on Terminals, Printers, Communications Products and Upgrade kits is 90 days from the date of shipment. Satisfaction of this warranty shall be limited to repair or replacement of Products which are defective or defective under normal use. Honeywell's warranty shall not extend to any Product which, upon examination, is determined to be defective as a result of misuse, improper storage, incorrect installation, operation or maintenance, alteration, modification, accident or unusual deterioration of the Product due to physical environments in excess of the limits set forth in Product manuals. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THIS PROVISION. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. NO REPRESENTATION OR WARRANTY OF THE DISTRIBUTOR SHALL EXTEND THE LIABILITY OR RESPONSIBILITY OF THE MANUFACTURER BEYOND THE TERMS OF THIS PROVISION. IN NO EVENT SHALL HONEYWELL BE LIABLE FOR ANY RE-PROCUREMENT COSTS, LOSS OF PROFITS, LOSS OF USE, INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES TO ANY PERSON RESULTING FROM THE USE OF HONEYWELL'S PRODUCTS.

Confidentiality

All software, drawings, diagrams, specifications, catalogs, literature, manuals and other materials furnished by Honeywell relating to the design, use and service of the Products shall remain confidential and shall constitute the proprietary rights of Honeywell, and Customer agrees to treat such information as confidential. Customer shall acquire no rights in the design of the Products or the related materials except to use such information solely for the purpose of and only during the time it sells the Products. Customer shall not copy the design of any Products or use or cause to be used any Product design or related materials for its own benefit or for the benefit of any other party. The covenants contained in this section shall remain effective

throughout the term of this Agreement and thereafter unless specifically waived by Honeywell in writing.

Other Notices

Indoor Use

This product is intended to be installed indoor, within the protected premises.

Invalidation

This product's compliance to ULC-S319, Electronic Access Control Systems, will be considered invalidated through the use of any add-on, expansion, memory or other module manufactured or supplied by the manufacturer or manufacturer's representative, unless specifically evaluated by ULC.

Unused conduit holes

All unused conduit holes must be properly plated or incorporate a Listed plug to fill any voids.

Interconnecting Devices

All interconnecting devices must be UL/ULC Listed.

Do Not Connect

Do not connect to a Receptacle controlled by a Switch.

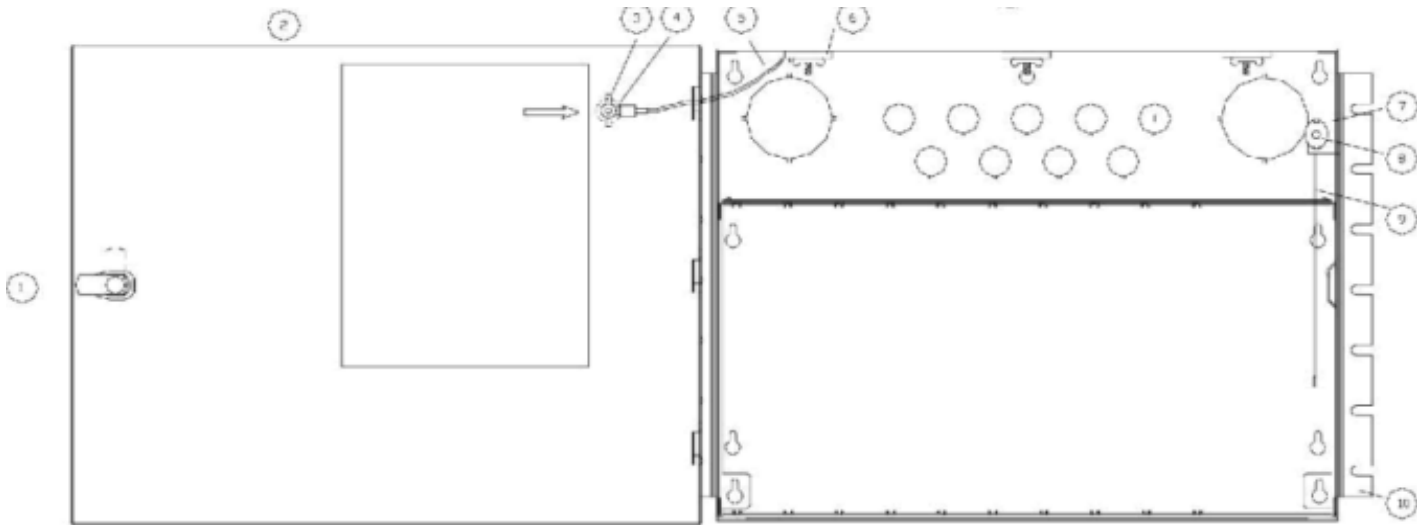
Separation of Circuits

The battery leads and primary AC main power wiring is non-power limited. This wiring must be separated from all other wiring by at least 0.25" and cannot be installed in the same conduit as any other power limited wiring. In addition a minimum of 0.25" must be maintained between the lead-acid backup battery itself and all other power limited wiring.

Wiring

All interconnecting cable must be UL/cUL listed, and suitable for the use.

PW-5000 Enclosure



PW5K2ENC1 / PW5K2ENC2

NUMBER	PART NUMBER	EACH	DESCRIPTION
1	PROBE1LK	1	LOCK W/TH RETAINING TANG AND KEY
2	PROBE1DR	1	REMOVABLE DOOR
3	PROBE1WN	4	8-32 WINGNUT
4	PROBE1QC	1	.25 MALE QUICK CONNECT
5	PROBE1GW	1	DOOR GROUNDING CABLE
6	PROBE1WR	3	7/8" WASHER
7	PROBE1TH	1	TAMPER SWITCH HOLDER
8	PROBE1SW	1	TAMPER SWITCH
9	PROBE1TS	1	TAMPER SWITCH CABLE
10	PROBE1FL	1	MOUNTING FLANGE FOR 19" RACK AVAILABLE ON REQUEST ONLY

Description

The PW-5000 system is designed for maximum efficient use of wall space through the use of a secure metal cabinet (PW5K2ENC1/PW5K2ENC2/PW5K2ENC1E/PW5K2ENC2E) that can hold up to nine modules, a 4 amp power supply (PW5K2E1PS) and a self-contained replaceable backup battery. The PW5K2ENC1 and PW5K2ENC1E enclosure assembly is designed to be mounted directly on a wall. The PW5K2ENC2 and PW5K2ENC2E enclosure assembly is designed to be mounted in a standard 19" equipment rack.

Typically, one of the nine modules can be an intelligent controller (PW6K1IC, PW5K1IC, or PW3K1IC). The remaining eight slots can be used and configured in a variety of combinations of readers, supervised inputs, relay outputs and other specialized modules to customize the system for the individual site.

The PW5K2ENC1/PW5K2ENC2/PW5K2ENC1E/PW5K2ENC2E can be configured in any combination of the PW3K1IC, PW5K1IC, PW6K1IC, PW5K1IN, PW5K1OUT, PW5K1R2, PW6K1IN, PW6K1OUT, PW6K1R2 and PW5K1R1. An

optional daisy chain cable (PW5K1DCC) provides an RS-485 communication and power bus between the nine modules.



Note: The following assemblies have not been evaluated by UL for use in combination with the PW6K assemblies for ULC installations: PW3K1IC, PW5K1IC, , PW5K1IN, PW5K1OUT, PW5K1R2, PW5K1R1.

Dimensions

	ENC1	ENC2
Height	13.9" [0.353 m]	13.9" [0.353 m]
Width	17" [0.4318 m]	18.9" [0.48006 m]
Depth	9" [0.2286]	9" [0.2286]

Metal thickness: .05" [1.27 mm]

Color: Autumn White

Installation holes: Four hangers in a rectangular pattern 12.1" [0.30734 m] H x 16" [0.40640 m] W

Conduit Knockouts

	½" [0.0127 m]	2" [0.05080 m]
Back	9	2
Top	9	2
Right Side	2	1
Left Side	2	1

Power Supply

Use PW6K2E2PS. (See Installation Manual 800-00005V3 for details.)

Maintenance

Oil lock once per year. If battery backup is used, change battery every 2 to 2 1/2 years.

Installation Instructions

1. Measure and install four mounting screws with heads smaller than .4" [0.01016 m] using proper techniques for the material on which the PW-5000 is being mounted. Use a rectangular screw pattern 12.1" [0.30734 m] H x 16" [0.40640 m] W. Leave the screws exposed approximately 1/2" [0.0127 m].
2. Open the door of the enclosure and place the hanging slots over the mounting screws. Push the enclosure over the mounting screws and allow the screws to

slide into the slots. Finish tightening the mounting screws to securely hold the enclosure.

3. Run all appropriate wiring to the case. Mark each wire as to the panel, location and input type. All cable shields should tie to one of the grounding lugs found at the top of the enclosure.



Warning: The earth ground wire that runs from the right most grounding post (looking at the enclosure from the front with door open) of the enclosure to the AC input plug has been factory installed and continuity tested for UL/ULC compliance. **Do not loosen or remove this nut for any reason or UL/ULC compliance will be void.** Other grounding wires can be clamped over the existing nut but the nut must not be removed or loosened. The nut thread is a standard 8-32.

4. Install the required panels into the metal runners. The power supply should be placed in the right most location and installed according to its own instruction manual. The PW5K1IC should be installed next to it as the right-most panel.
5. Wire the readers, input and output connections. For wall mounted installation; all low-voltage wiring that passes through the back of the enclosure must be secured with UL/CUL wire bushings/cord-grips in order to maintain the fire enclosure barrier.
6. CHECK ALL CONNECTIONS PRIOR TO POWERING UP THE ENCLOSURE AND PANELS.
7. The remainder of the panels can be manually wired for power and RS-485 communications using 18 AWG wire. The wires will be daisy-chained from one panel to the next so the power and the communications are wired in parallel. PW5K1DCC is available as an option to be purchased with the equipment. This will reduce wiring time in the field since the power and RS-485 communications between panels is factory-wired in a harness that plugs into the bottom two connectors on each panel. The only field wiring required is the two wiring connections of the red and black 12 VDC cables connecting the PW5K1DCC and the PW5K2E1PS power supply.
8. Module Retainer Kit (for UL S-319 installations only). In order to maintain UL S-319 compliance the enclosure must be fitted with the PW5K2MRK module retainer kit (sold separately). After all wiring is complete, place the module retainer in the bottom of the enclosure between the modules and the door. The device should fit snugly into the space in front of the modules while allowing the door to close normally.

9. Secure battery (for UL s-319 installations only). In order to maintain UL S-319 compliance the battery must be secured to the top of the card cage using hook and loop straps (1/2" by 20" straps).

Step 1 -- Weave Velcro straps through slots in "belt-loop" fashion, as shown in the below photo:

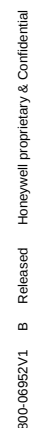


Step 2 -- Insert battery over the Velcro straps and fasten the Velcro as tightly as possible, as shown in the below photo:



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