

*Model PS-4001*  
*Power Supply*  
*User Instructions*



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**WARRANTY NOTICE**

See the enclosed warranty card for further details.

**CUSTOMER SUPPORT**

Technical questions should be directed to:

Customer Service Department  
 Bosch Security Systems, Inc.  
 12000 Portland Avenue South  
 Burnsville, MN 55337 USA  
 Telephone: 1-877-863-4169  
 Fax: 800-323-0498

**RETURN SHIPPING INSTRUCTIONS**

Customer Service Department  
 Bosch Security Systems, Inc. (Lincoln, NE)  
 Telephone: 402-467-5321  
 Fax: 402-467-3279  
 Factory Service: 800-553-5992

Please include a note in the box which supplies the company name, address, phone number, a person to contact regarding the repair, the type and quantity of equipment, a description of the problem and the serial number(s).

**SHIPPING TO THE MANUFACTURER**

All shipments of product should be made via UPS Ground, prepaid (you may request from Factory Service a different shipment method). Any shipment upgrades will be paid by the customer. The equipment should be shipped in the original packing carton. If the original carton is not available, use any suitable container that is rigid and of adequate size. If a substitute container is used, the equipment should be wrapped in paper and surrounded with at least four (4) inches of excelsior or similar shock-absorbing material. All shipments must be sent to the following address and must include the Proof of Purchase for warranty repair. Upon completion of any repair the equipment will be returned via United Parcel Service or specified shipper, collect.

Factory Service Department  
 Bosch Security Systems, Inc.  
 8601 East Cornhusker Hwy.  
 Lincoln, NE 68507 U.S.A.  
 Attn: Service

**FCC STATEMENT**

This equipment users, and can radiate radio frequency energy that may cause interference to radio communications if not installed in accordance with this manual. The equipment has been tested and found to comply with the limits of a Class A computing device pursuant to Subpart J, Part 15 of FCC Rules which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference which the user (at his own expense) will be required to correct.

 This product meets Electromagnetic Compatibility Directive 89/336/EEC

This package should include:

QTY	DESCRIPTION	PART NO.
1	PS4001 Final Assembly	90107710000 (US) or 90107710001 (EU)
1	Power Cord	2504000300
1	User Manual	93507710000
1	Warranty Card	38110-390
1	User Information	38110-668
1	Statement of Conformity	38110-675
1	Int'l Cordsets, European model only	550024000
4	Rubber Feet	56471-001

		
THE LIGHTNING FLASH AND ARROWHEAD WITHIN THE TRIANGLE IS A WARNING SIGN ALERTING YOU OF "DANGEROUS VOLTAGE" INSIDE THE PRODUCT.	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	THE EXCLAMATION POINT WITHIN THE TRIANGLE IS A WARNING SIGN ALERTING YOU OF IMPORTANT INSTRUCTIONS ACCOMPANYING THE PRODUCT
SEE MARKING ON BOTTOM/BACK OF PRODUCT		
<b>WARNING:</b> APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.		
<b>WARNING:</b> THE MAIN POWER PLUG MUST REMAIN READILY OPERABLE.		
<b>CAUTION:</b> TO REDUCE THE RISK OF ELECTRIC SHOCK, GROUNDING OF THE CENTER PIN OF THIS PLUG MUST BE MAINTAINED.		
<b>WARNING:</b> TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPRATUS TO RAIN OR MOISTURE.		
<b>WARNING:</b> TO PREVENT INJURY, THIS APPARATUS MUST BE SECURELY ATTACHED TO THE FLOOR/WALL/RACK IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS.		
	This product is AC only.	

## *Important Safety Instructions*

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



# Operation and Specifications

## Operation

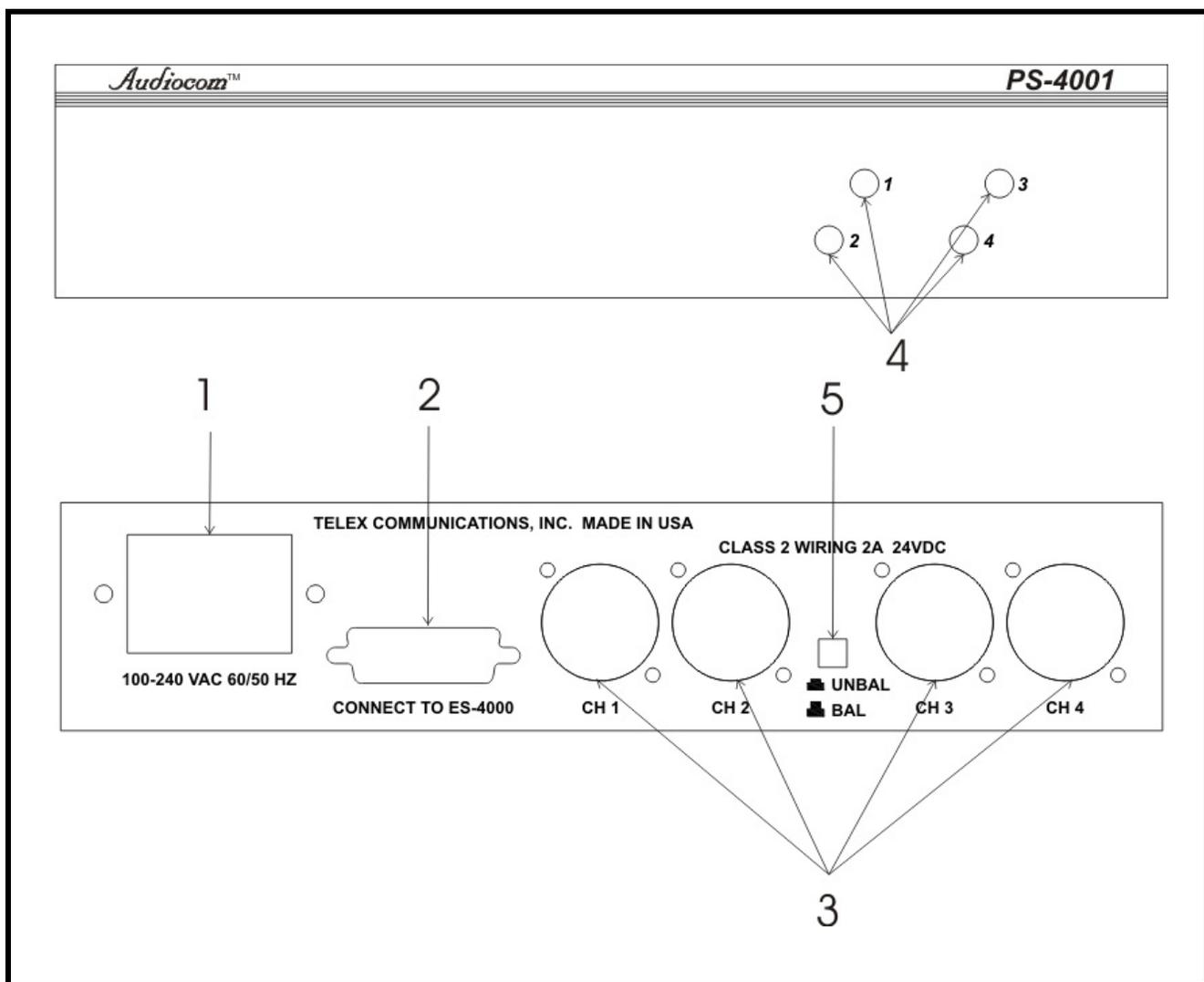
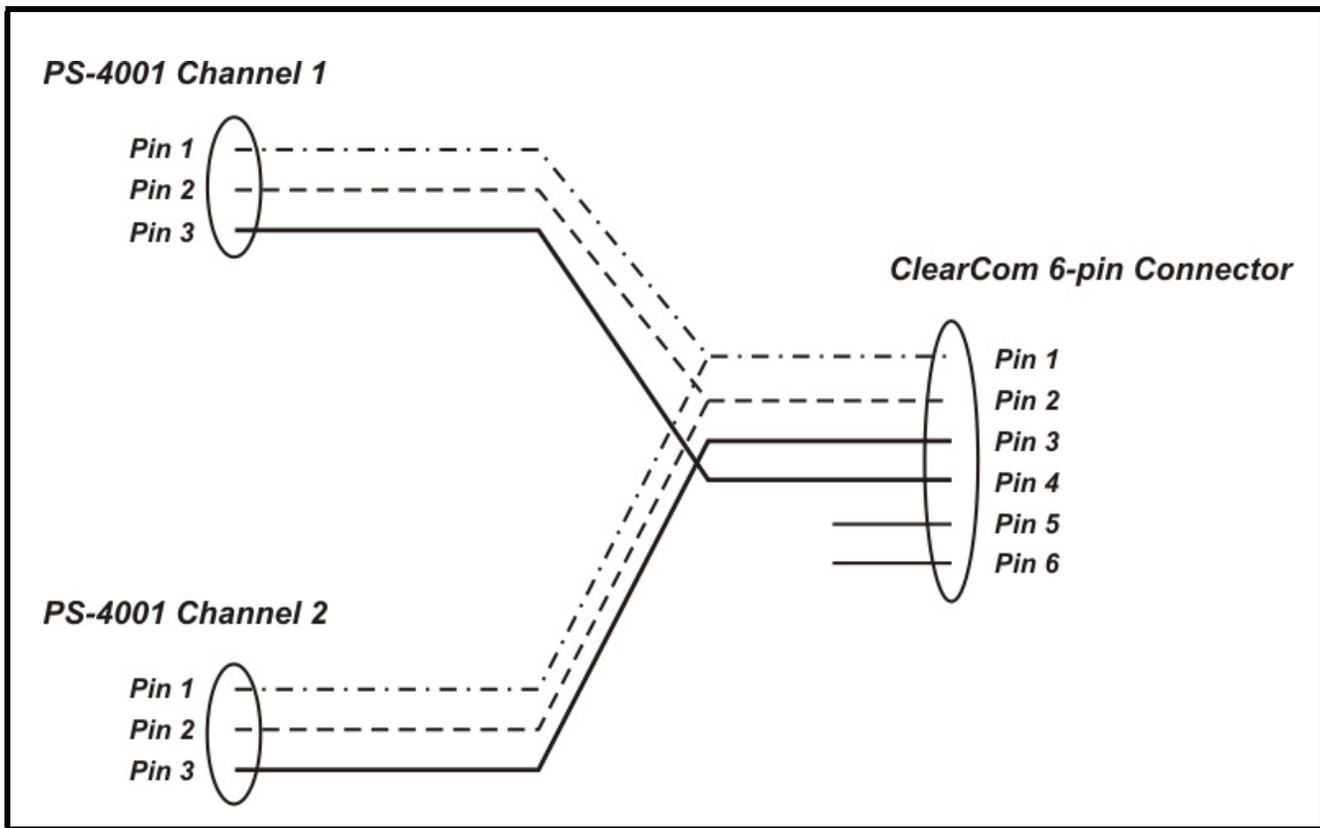


FIGURE 1. PS-4001 Reference View

1. Universal AC Power Input: The unit accepts any input power in the range of 100-240 VAC, 50/60 Hz.
2. Connector to ES-4000A: This connector carries power to the ES-4000A expansion station, and carries the four audio channels of the ES-4000A. When a Telex ES-4000A is connected to the PS-4001, each of the four channels of audio is "broken out" to the respective channel connections.
3. Intercom Channel Connectors: These connectors carry power to the intercom system and provide termination for the audio signal of each individual intercom channel.
4. Channel Status Indicators: The indicators are green for normal operation and red when there is an overload or short circuit. The circuitry in the unit will automatically reset when the overload or short circuit is located and fixed, and the LED will go back to green.
5. BAL/UNBAL Selector Switch: This selector switch allows the user to configure the unit for use in either an Audiocom (BALANCED) or ClearCom (UNBALANCED) system. Compatibility includes channel connector pin-outs, channel power requirements, and call signaling requirements. The default setting for this switch is in the Audiocom (BAL) position.

**NOTE:** In order to connect the PS-4001 to a 2-channel ClearCom system using a 6-pin connector, an adaptor cable, shown in Figure 2, must be constructed.



**FIGURE 2.** ClearCom Cable Assembly

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## Specifications

### GENERAL

Input Power Requirements: 100 to 240 VAC, 50/60 Hz, 1.0 Amp maximum

Output Power (each channel): 24  $\pm$ 1 VDC, 1 Amp per channel (not to exceed 3.0 Amp total)

Dimensions: 1.75" (44.5mm) high x 8.25" (209.5mm) wide x 10.31" (261.9 mm) deep

Weight: approximately 2.5lb. (1.13 kg)

Environmental Requirements:

Storage: -20°C to 80°C, 0% to 95% humidity, non-condensing

Operating: 0°C to 50°C, 0% to 95% humidity, non-condensing

### INTERCOM CHANNELS - General

Connector Type: One XLR-3M audio connector for each channel. Pin-out depends on setting of BAL/UNBAL switch for balanced or unbalanced operation as defined below:

#### Balanced Mode (Set to BAL position)

Line Terminating Impedance: 300 Ohms  $\pm$ 10%

Connector Pinout

Pin 1 Common (audio and DC return)

Pin 2 Full-Duplex, balanced intercom audio and +24 VDC output

Pin 3 Full-Duplex, balanced intercom audio and +24 VDC output

#### Unbalanced Mode (Set to UNBAL position)

Line Terminating Impedance: 200 Ohms  $\pm$ 10%

Connector Pinout

Pin 1 Common (audio and DC return)

Pin 2 +30  $\pm$ 1 VDC output

Pin 3 Full-Duplex, unbalanced intercom audio high

### APPROVALS

UL, CUL, CE

