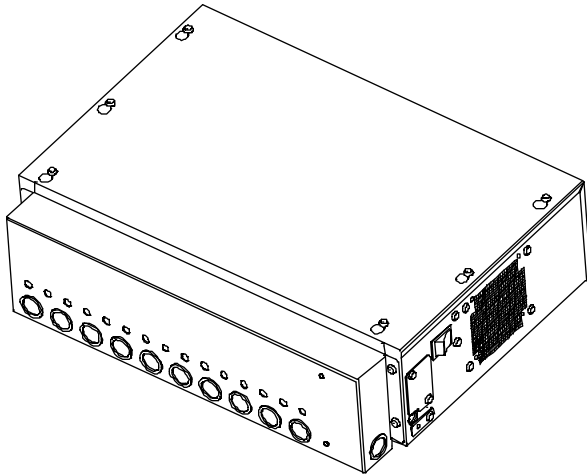


## ADS 216 Power Pack



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**PRELIMINARY – 01/05/00**

### About this Guide

This installation guide explains how to install the ADS 216 Power Pack. Other related documents are:

- Planning Guide, 8000-2693-01
- Installation Guide, ADS Pro•Max Pedestals, 8000-2693-03
- Installation Guide, ADS Floor•Max Antennas, 8000-2693-03
- Setup and Service Guide, 8000-2693-xx
- Reference Guide, 8000-2693-xx

**Note:** Because placement of system components depends on architectural and customer requirements, your Sensormatic representative will supply this information separately.

If you need assistance...

Call Sensormatic Customer Support at:

**1-800-543-9740**

### Limitation of Warranty

Any deviations from the materials or procedures specified herein shall void Sensormatic's warranty with the owner/buyer. In no event shall Sensormatic be liable for loss or damage caused by the use of materials or procedures that do not meet Sensormatic's specifications.

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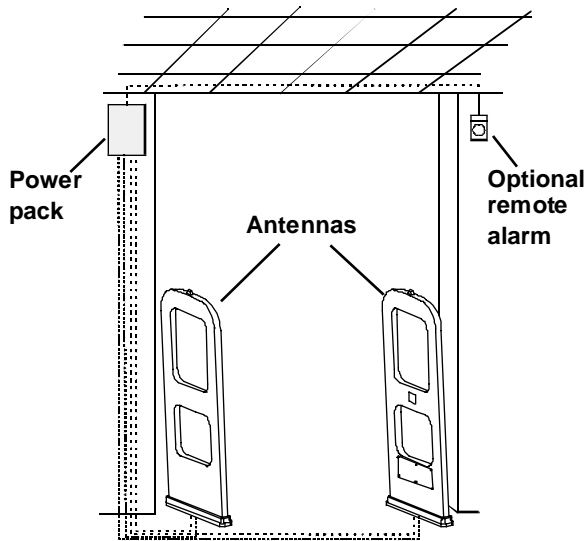
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DOJ 01/00

## Power Pack Overview

The ADS 216 Power Pack is part of an Ultra•Max® security label detector. The power pack controls up to two transceiver antennas and two remote alarms.

Figure 1. Ultra•Max Detector



The ADS 216 Power Pack, ZEADS216 (Non-European) ships with the antennas or can be ordered separately.

## Installation Requirements

### Verifying Equipment and Unpacking

- ☐ Verify that all equipment has arrived. Make sure the system configuration is the right one for the installation site.
- ☐ Unpack major components in a back room. At the install site, lay out parts in the order you will need them. Do not clutter the aisle or cause a trip hazard.

### Installer/Contractor

- ☐ Shall have electrical work comply with the latest national electrical code, national fire code, and all applicable local codes and ordinances.
- ☐ Shall coordinate all work with other trades to avoid interference.
- ☐ Shall verify existing site conditions and coordinate with the owner's representative and appropriate utilities as required.
- ☐ Shall obtain copies of all related plans, specifications, shop drawings and addenda to schedule and coordinate related work.
- ☐ Shall thoroughly review the project to ensure that all work meets or exceeds the above requirements. Any alleged discrepancies shall be brought to the attention of Sensormatic Electronics.



#### **WARNING!**

Do not install this product in hazardous areas where highly combustible or explosive products are stored or used.

## Electrical Requirements

- ☐ Connect the pack to a 100-120Vac or 220-240Vac source. No fuse exchange is required for the power pack.
- ☐ The ac source must be unswitched with less than 0.5Vac between neutral and ground.
- ☐ DO NOT share the ac source with neon signs, motors, computers, cash registers, terminals, or data communications equipment.
- ☐ DO NOT use orange-colored outlets dedicated for computer equipment.

## Power Pack

- ❑ The pack can be placed on a shelf or mounted on a wall. The pack can be hidden in a remote location such as checkout counter, back room, or basement.
- ❑ Provide a minimum of 20cm (8") of unobstructed space around the pack for ventilation.
- ❑ Use the appropriate power cord based on the country of use.

USA-IEC 320, 18/3, 125V, 10A, 7.5ft.	0351-0547-01
Schuko-IEC 320, 1mm sq., 250V, 10A, 2.5m	0351-0547-02
UK-IEC 320, 1mm sq., 250V, 10A, 2.5m	0351-0547-03
Japan-IEC 320, 2mm sq., 250V, 15A, 2.5m	0351-0547-04
US-Filter, Line, 125V, 6A, Plug-in	0351-0547-05
Australia to IEC 320, 2.5m, 250V, 10A	0351-0547-07
- ❑ Replace the pack's slow-blow fuses only with a fuse of the same type and rating.
- ❑ Maximum cable distance from the antennas to the power pack is 12.2m (40').

## ZC30-XP/ZC35-XP

### Remote Alarm Unit (if used)

- ❑ Plug the transformer used to power the alarm into a 24-hour, unswitched outlet.
- ❑ Maximum cable distance from the power pack to each alarm unit is about 7.6m (25').

## Tools and Equipment Required

For all system installations:

- 6 mil (minimum) plastic sheeting (to protect nearby items from dust)
- Permanent marker and/or pencil
- Hammer drill with 6.5mm (1/4") and 9.6mm (3/8") masonry drill bits
- Power drill with 1.6mm (1/16"), 6.5mm (1/4"), and 9.6mm (3/8") drill bits
- Hammer
- Phillips and slotted screwdrivers
- Ratchet and socket set
- Vacuum and broom

## Installing the Power Pack

The pack can rest on a shelf (no mounting procedure required) or can be hung on a wall.

To mount the pack on a wall, proceed to the section **"Wall-mounting the Power Pack"** on **page 3**.

Otherwise, go to **"Connecting the Alarm Cable"** on **page 4**.

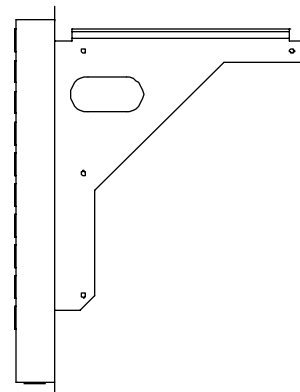
## Wall-mounting the Power Pack

### 1. Attach the bracket to the wall (Figure 2).

The pack can be mounted on studs using screws or on wall-board using screws and anchors.

- a. Position wall-mount bracket and level it to mark the mounting hole locations. Remove the bracket.
- b. If mounting on wall-board, drill four holes for hollow wall (wall-board) anchors. Tap anchors (not shown) into holes.
- c. With its lip facing upward, secure the bracket to the wall with four screws. The screws are suitable for use in wood or metal.

**Figure 2. Attaching the bracket to the wall**



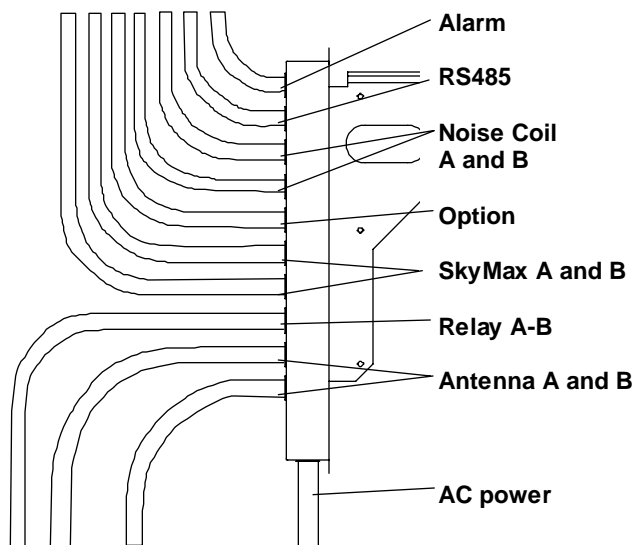
## 2. If using conduit, attach conduit to bracket.

The power pack bracket provides ten ½" or ¾" knockouts for antenna and alarm cables and one ½" or ¾" knockout for hardwired AC power. Refer to Figure 6.

Antenna Tx/Rx and Com cables attach to connectors in the lower corner of the power pack. The remote alarm cable attaches to a connector above the antenna cable connectors.

Select knockouts closest to the power pack connectors for the cables and attach conduit. Maximum conduit attachment is shown in Figure 3. Several cables can share conduit as long as conduit fill does not exceed 50 percent.

Figure 3. Maximum conduit attachment



## 3. Mount the pack to the bracket.

- Rest the lip of the pack's mounting bracket on the lip of the wall-mounted bracket.
- Slide pack to left until pack butts up against wall-mounted bracket.

## 4. After cable connections are complete, attach bracket to power pack using two screws at each end of bracket.

Mounting the power pack is complete. Go to **"Connecting the Alarm Cable"** on page 4.

## Connecting the Alarm Cable

The power pack can trigger up to two remote alarms.

To connect remote alarms, continue.

Otherwise, go to **"Connecting Power to the Power Pack"** on page 5.

Connect the remote alarm to the Relay A-B alarm receptacle of the power pack (Figure 6).

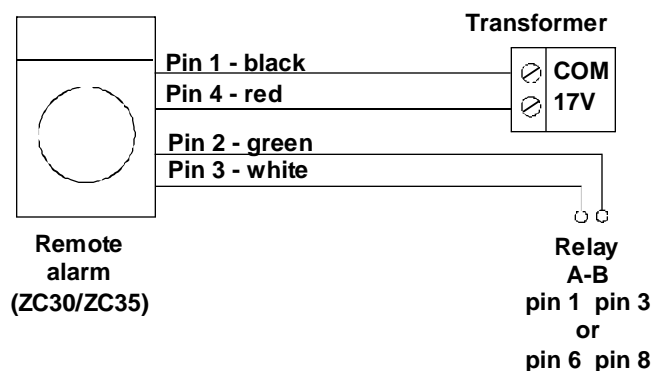
Relay A-B pin assignments are as follows:

### Pin Relay Output

1	Relay A Arm
2	Relay B N.C.
3	Relay C N.O.
4	Shield
5	Not used
6	Relay B Arm.
7	Relay B N.C.
8	Relay B N.O.
9	Shield

For example, connect the remote alarm controlled by relay 1 to pins 1, 2, and 3. Refer to Figure 4 for remote alarm wiring.

Figure 4. Remote alarm wiring



## Connecting Power to the Power Pack



**For installation using a line cord, the socket-outlet must be installed near the equipment and at a location which is easily accessible.**

Für Installationen mit einem Stromkabel muß die Steckdose an einem Standort installiert werden, welcher einfachen Zugang erlaubt.



**A 6A, 2 pole, ganged disconnect device, which also provides short circuit and overload protection, and has a minimum 3mm open circuit clearance, in accordance with the National Electric Code and applicable local codes must be installed by a licensed electrician at a location readily accessible to the equipment.**

Ein 6A, 2-poliges, gekoppeltes Ausschaltgerät, welches auch über einen Kurzschluß- sowie Überbelastungsschutz verfügt, und einen minimum 3mm offenen Schaltabstand aufweist, nach Übereinstimmung mit den Nationalen Elektrischen Regelungen sowie lokalen Regeln, muß an einem Standort installiert werden, welcher einfachen Zugang zum Gerät erlaubt.



### **WARNING—RISK OF ELECTRIC SHOCK!**

The AC power line could be carrying 120Vac or 240Vac.

If ac power is connected by a power cord, remove the metal cover over the IEC connector (Figure 6) and attach the power cord.

If ac power is hardwired, do the following:

1. Route power cable through knockout on corner of power pack (Figure 6).
2. Using a small screwdriver, connect the ac power wires (line, neutral) to the two-pin connector in terminal P2. Connect white to pin 1 (neutral); connect black to pin 2 (line). Refer to Figure 5.
3. Plug the two-pin connector into pluggable terminal P2 on the backplane board.
4. Connect green to ground on the power pack chassis.

**Figure 5. Hardwired AC power connection**

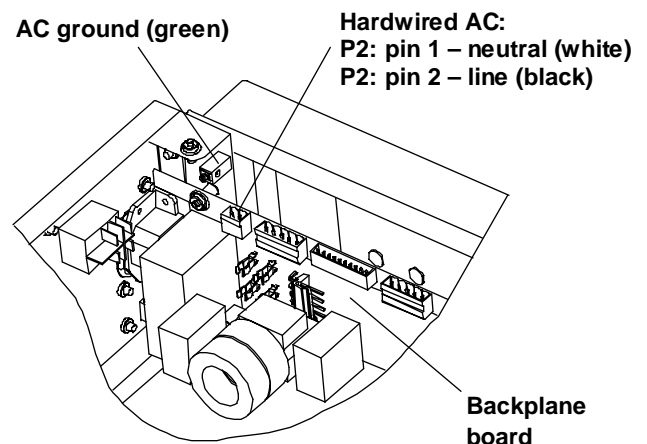
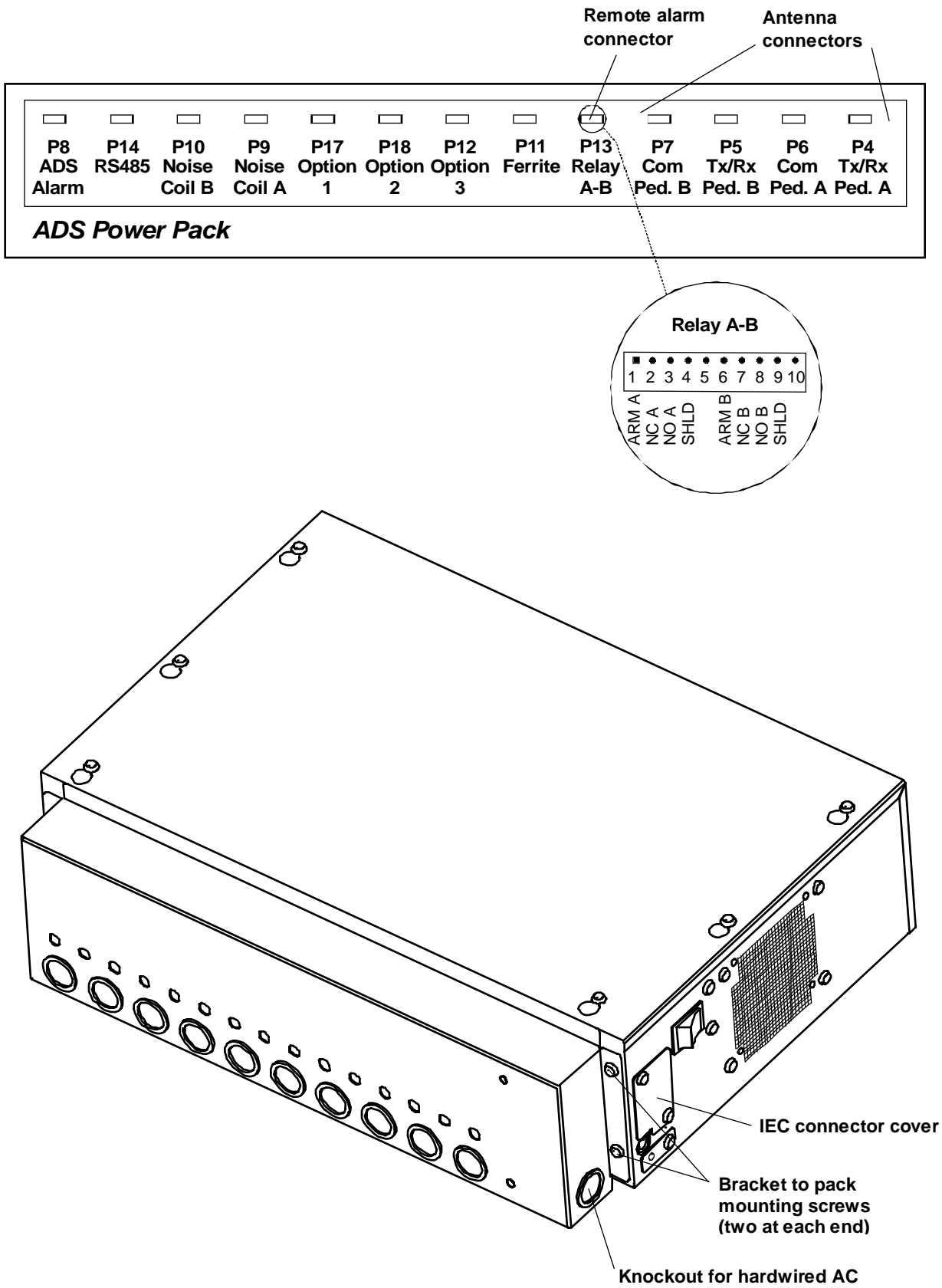


Figure 6. Power pack connections



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## Specifications

### Electrical

#### Power Supply (Non-European Power Pack)

Primary Input: .....100-120Vac or  
220-240Vac  
@ 50–60Hz

Primary Power Fuse: .....5A, 250V slo-blow

Current Draw: .....2.0A peak

Input Power: .....<180W

#### Transmitter

Outputs: .....2 ports (two antennas,  
multiplexed)

Operating Frequency: .....58, 60, or 68kHz  
(±200Hz)

Transmit Burst Duration .....1.6ms

Transmit Current: .....16A peak

Burst Repetition Rate:

Based on 50Hz ac .....37.5Hz (Normal)  
75Hz (Validation)

Based on 60Hz ac .....45Hz (Normal)  
90Hz (Validation)

#### Receiver

Inputs: .....2 ports (two antennas,  
multiplexed)

Center Frequency: .....58, 60, or 68kHz

Receive Coil Resistance: ...1.6 ohms (±5%)

#### Alarm

Alarm Relay Output .....DPDT contacts

Contact Switching Current .1.0A max.

Contact Switching Voltage .28V max.

Lamp/Audio Duration .....1–30 sec.  
(1 sec. increments)

### Environmental

Ambient Temperature: .....0°C to 50°C  
(32°F to 122°F)

Relative Humidity: .....0 to 90%  
non-condensing

### Mechanical

#### Power Pack

Length .....50.7cm (20")

Width with bracket .....37.7cm (14.8")

Width without bracket .....32.6cm (12.8")

Height .....15cm (5.9")

Weight .....kg (lbs.)

#### Remote Alarm / Message Unit

Height .....20.3cm (8")

Length .....15cm (5.9")

Width .....6.4cm (2.5")

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# Declarations

## Regulatory Compliance (Non-European Power Pack)

Safety:..... UL 1950  
Can/CSA C22.2  
No. 950

EMC:..... 47 CFR, Part 15

**FCC COMPLIANCE:** This equipment complies with Part 15 of the FCC rules for intentional radiators and Class A digital devices when installed and used in accordance with the instruction manual. Following these rules provides reasonable protection against harmful interference from equipment operated in a commercial area. This equipment should not be installed in a residential area as it can radiate radio frequency energy that could interfere with radio communications, a situation the user would have to fix at their own expense.

**EQUIPMENT MODIFICATION CAUTION:** Equipment changes or modifications not expressly approved by Sensormatic Electronics Corporation, the party responsible for FCC compliance, could void the user's authority to operate the equipment and could create a hazardous condition.

## Other Declarations

**WARRANTY DISCLAIMER:** Sensormatic Electronics Corporation makes no representation or warranty with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. Further, Sensormatic Electronics Corporation reserves the right to revise this publication and make changes from time to time in the content hereof without obligation of Sensormatic Electronics Corporation to notify any person of such revision or changes.

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