




# PDi Central Power Supply

For model number: PDI-772HE-IND

## **INSTALLATION INSTRUCTIONS**

Document Number: PD196-181R4

**This manual is intended for qualified installers.**  
Please read the safety and operating instructions and retain this document for future reference.

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## Important Safety Instructions

	This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.		<div style="background-color: black; color: white; padding: 5px; font-weight: bold; font-size: 1.2em;">CAUTION</div> RISK OF ELECTRIC SHOCK, DO NOT OPEN!	
	This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.	<b>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL</b>		

**WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

**WARNING:** To prevent injury, this apparatus must be securely attached to the wall in accordance with the installation instructions.

**WARNING:** Do not install this equipment in a confined space such as a cabinet, drop ceiling, or similar space.

**CAUTION:** Do not block ventilation openings. Install in accordance with the manufacturer's instructions.

### REGULATORY INFORMATION FCC PART 15

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### Modifications

Any changes or modifications made to this device that are not expressly approved by PDi may void the user's authority to operate the equipment.

### Cables

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

### Healthcare Grade Power Supply

The PDi Healthcare series television is specifically designed for installation and use in a healthcare environment in which installation is limited to a nonhazardous area in accordance with the National Electrical Code, ANSI/NFPA70.

## Important Safety Instructions

### Servicing

If your product is not operating correctly or exhibits a marked change in performance and you are unable to restore normal operation by following the detailed procedure in its operating instructions, do not attempt to service it yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

### Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or damaged in any way.
- When the product exhibits a distinct change in performance which indicates a need for service.

### Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

### Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in a safe operating condition.

### Cleaning & Disinfecting

- Unplug the TV before cleaning.
- Use a soft damp cloth to clean.
- Do not use harsh chemicals such as solvents.
- Wipe off water droplets from the cabinet as soon as possible as they may leave spots.

### Disclaimer

The author and publisher have used their best efforts in preparing these instructions. PDi Communication Systems, Inc. makes no representation or warranties with respect to the accuracy or completeness of the contents of this guide and specifically disclaims any implied warranties or merchantability or fitness for any particular purpose and shall in no event be liable for any loss of profit or any other damages. The information contained herein is believed accurate, but is not warranted and is subject to change without notice or obligation.

### Copyright

PDi Communication Systems, Inc. claims proprietary right to the material disclosed in these instructions and issues them for user information only and may not be used to manufacture anything shown herein. Copyright 2026 by PDi Communication Systems, Inc.

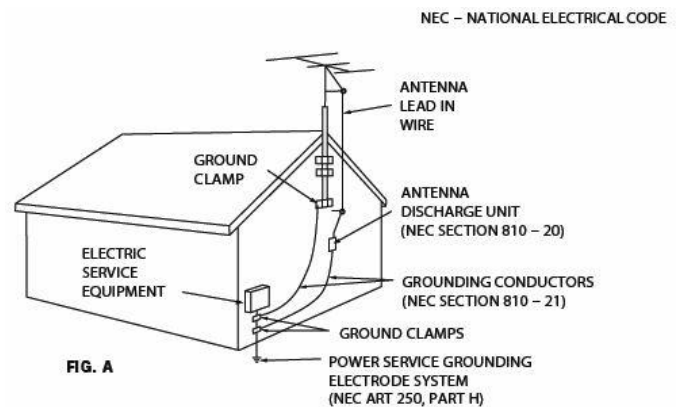
## Important Safety Instructions

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. Unplug this supply from the wall outlet before cleaning. Do not use harsh chemicals such as solvents. Use a damp cloth for cleaning. Do not immerse this power supply in water.
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. This power supply incorporates a three-wire grounding-type plug, a plug having a third grounding pin. This plug will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purposes of the grounding type plug.
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. This power supply is intended for permanent installation. It is not intended for mobile operation. Do not use this product with a cart.
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.

15. This appliance should be mounted to a wall only. Do not mount this supply to or in a ceiling.
16. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
17. If an outside antenna or cable system is connected to the video product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.



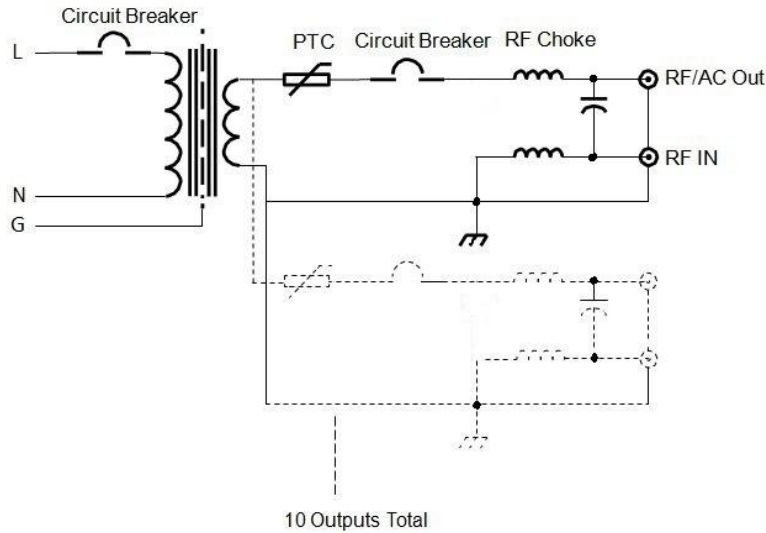
**NOTE:** This reminder is provided to call the CATV system installer's attention to article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

18. This supply does not require periodic maintenance other than cleaning.


**Theory of Operation**

The PDI-772HE-IND is designed to power arm-mounted small screen televisions. The unit is typically installed in a utility or telephone closet some distance from the actual TV location. The supply provides low voltage AC power and RF cable TV signal along a connecting coax cable to a patient room television. Unique to the PDI-772HE-IND are individual RF Inputs allowing a dedicated set top satellite box, a cable box, or other similar RF device to be directed to one specific television.

Please refer to the schematic below. AC line voltage is stepped down using an isolation transformer incorporating a Faraday Shield. The non-regulated secondary output voltage is approximately 28 VAC. Redundant current protection is provided using a PTC and Circuit Breaker for each output. A simple LC network is used to mix cable TV RF signal with the 28 VAC power voltage that is then supplied to the output F connector. 10 separate RF Inputs and 10 corresponding RF/AC Outputs are provided.



Input Voltage	120 VAC Maximum
Input Current	10 A
RF Inputs	10
RF/ACTV Outputs	10
Output Voltage	28VAC
Output Current	3 Amps (NEC Class II Level)
RF Insertion Loss	-1 db or less
RF Passband	10 ~ 1000 Mhz
Waste Heat	110 Watts @ Full Rating
Weight	29 lbs.
Operational Temp.	20~50°C

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# Installation

### Guidelines

The PDI-772HE-IND is a specialized power supply designed to power low-voltage AC small screen televisions and is intended for use in a hospital, a nursing home, a medical-care center, or a similar healthcare facility in which installation is limited to a non-hazardous area in accordance with the National Electrical Code ANSI/ NFPA70.



This installation should be done by a qualified service person and should conform to all local codes. Do not attempt this installation without an assistant.

### Location

The supply is mounted in a utility or electrical closet near an AC wall outlet. Due to coaxial cable length restrictions, select a location that limits the longest coaxial cable run (i.e., the distance between the supply and furthest room) to a maximum of 150 feet. Refer to the section titled *CATV Wiring* for coax cable recommendations.

### Cooling

This power supply is engineered for high efficiency. Please observe these guidelines:

1. Select a location with a maximum ambient room temperature of less than 100°F.
2. The supply covers a 10 x 14¾" area and extends 7" from the wall. Allow a minimum clearance distance of 8 inches on top, bottom, and both sides of the power supply cabinet. This clearance is required for cooling. Do not cover or obstruct ventilation grills on the cabinet as this supply utilizes convection cooling. For example, the supply should NOT be mounted in a drop ceiling due to the restricted airflow that occurs in such a tight air space.
3. Do not route cables between the wall and back of the power supply. The back of the supply must be kept clear to allow for convection air cooling.
4. The supply when under full load will generate approximately 110 watts of waste heat. Please consider the installed locations additional temperature rise caused by operation of this supply.

### Electrical

This power supply requires a 120 VAC circuit capable of supplying 10 amperes of current. A 10-foot hospital grade cordset with NEMA 5-15P plug is supplied with this unit. Do NOT use an extension cord with this power supply.

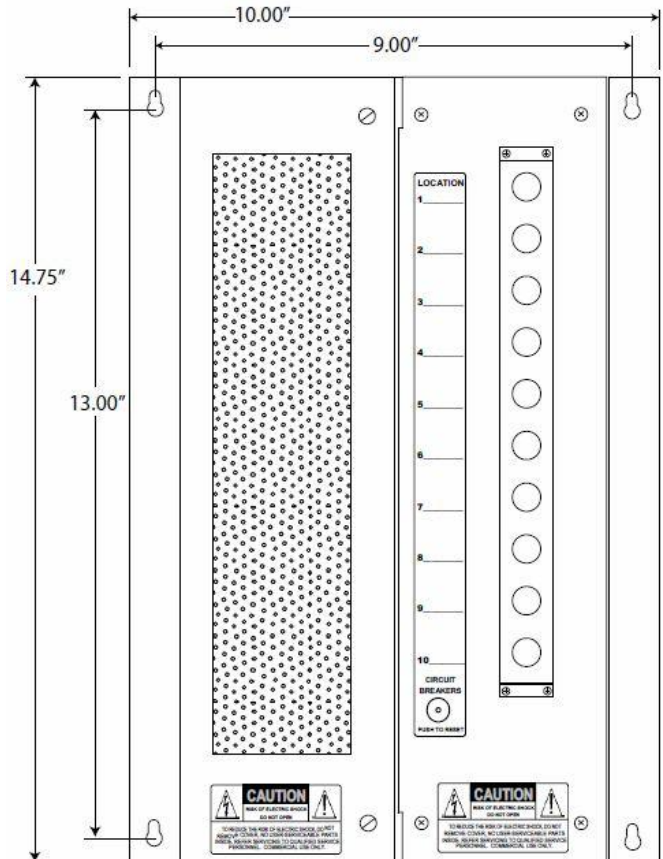
### Wall Installation


The central power supply is designed to mount on a wall in an upright position with the power cord pointing down. The supply should be positioned near an AC wall outlet. This unit is convection cooled and requires clearance at the top, bottom, and sides of the enclosure - see *Guidelines* for details.

Position the supply maintaining clearance. Mark the four mounting hole locations.

Drill and install four, 1/4-20 toggle bolts (not supplied) at each of the mounting hole locations. Expose 1/2 inch of thread on each bolt.

Center the supply over the 1/4-20 bolts. Tighten.



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**CATV Wiring**

NOTE TO CATV SYSTEM INSTALLER: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and specifies that the cable ground should be connected to the grounding system of the building, as close to the point of cable entry as practical.

**COAX CABLE SPECIFICATION**

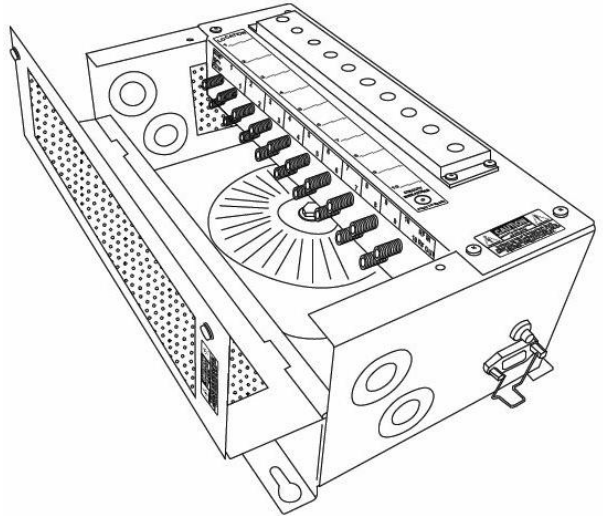
Due to long cable runs encountered in hospital installations, RG-6 coaxial cable employing a solid copper center conductor and copper shield is required. Cable run lengths between the central power supply and room mounted televisions MUST NOT exceed 150 feet.



DO NOT USE a copper clad steel center conductor style coax cable. This style of coax can be easily confused with a pure copper coax as the steel center conductor is plated with a copper cladding - it looks like copper. As a test, touch a magnet to the center conductor. If it sticks to the center conductor, you have steel hidden beneath a copper cladding. DO NOT USE IT!

Recommended RG-6 coaxial cable numbers to use include Alpha M4182, Belden 9248, West Penn 806, or West Penn 25806 (plenum).

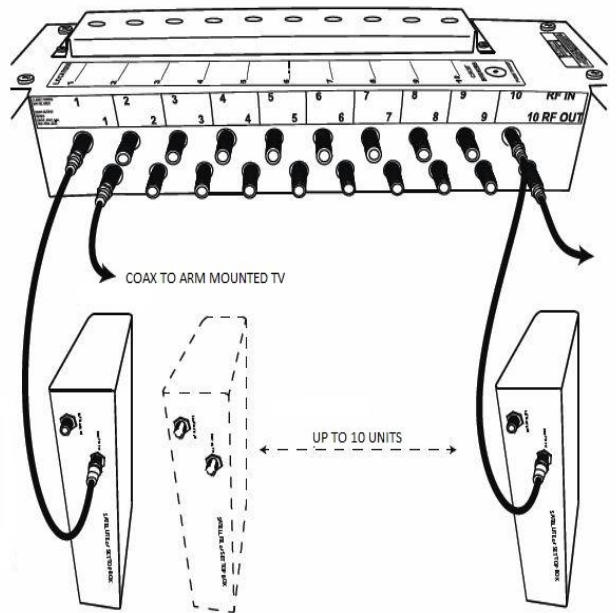
The number one installation problem is the use of the WRONG type of coax - one that employs a copper clad steel center conductor. The coax must carry not only cable TV RF signal, but also the AC power to each television location. Unfortunately, the copper clad steel center coax offers almost 10 times the electrical resistance compared to a coax with a pure solid copper center conductor. In other words, a 15-foot length of copper clad steel coax electrically looks equivalent to a 100-foot pure copper cable. The steel cable offers too much resistance to the low frequency AC power current. The typical problems are those associated with low voltage - the TV operates erratically or not at all.



**Cabling the Supply For Individual Signals**


The PDI-772HE-IND is uniquely designed to provide individual inputs for each output, resulting in each TV viewing a different signal. The PDI-772HE-IND provides a means to insert the output of an individual cable box or satellite box onto a coax line power TV system.

- This supply is provided with conduit knockouts on the top, left side, and bottom of the cabinet as cable entry points.
- Verify the power supply is disconnected from AC power
- Loosen (2) screws from the face of the cabinet and detach the ventilation cover exposing the RF "F" connector rows.
- Connect the RF signal cable from the satellite or set top box to the RF IN "F" connector (Top Row).
- Connect the coax cable to the arm mounted TV to the corresponding RF OUT "F" connector (Bottom Row). The PDI-772HE-IND supports up to 10 satellite or set top boxes.



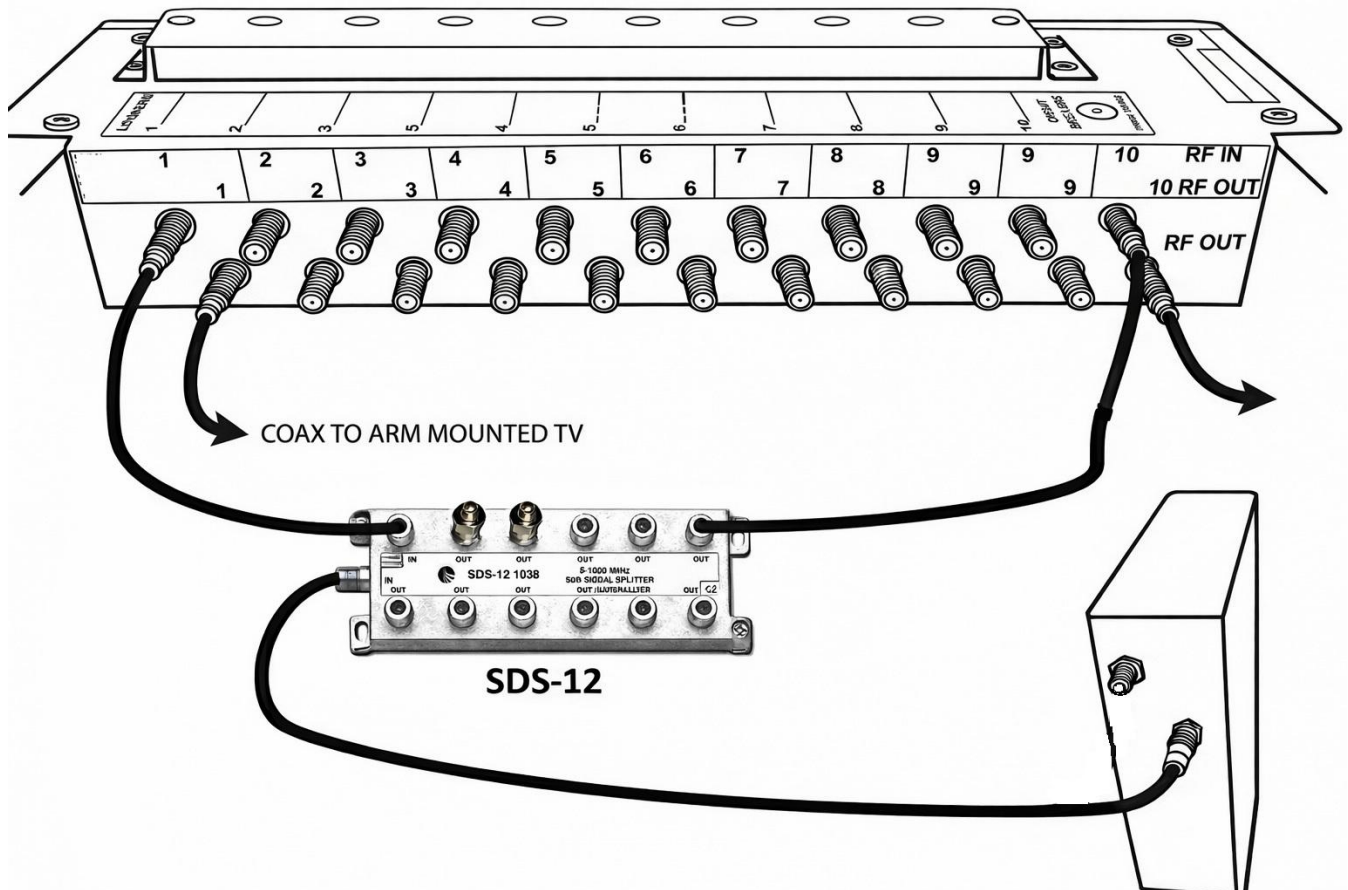
**CAUTION:** Connecting the set top box signal cable to RF OUT (Bottom Row) will damage the box.


- Replace the ventilation cover. Tighten the (2) cover screws.
- Use a permanent marker to identify each cable on the LOCATION label next to the circuit breaker field.

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### Cabling the Supply for a Single Input Signal

The PDI-772HE-IND may be configured for a single RF input to function in the same way as the PDI-772HE central power supply. Read the above section “Cabling the Supply for Individual Signals” to familiarize yourself with the unit. Then simply wire the signal source into a 12-way RF splitter. 10 of the 12 splitter outputs must be wired to each PDI-772HE-IND RF input. The remaining 2 splitter outputs must be terminated with 75-ohm RF terminators. PDi recommends using the Blonder-Tongue SDS-12 splitter. Here is a [link](#) to the splitter.



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### Operating

Operation of the PDI-772HE involves powering the unit, verifying the TV powers “on” and checking the powered TV for proper signal.

### Powering the Supply

Lift the plug keeper and insert the IEC power cord plug into the AC jack located on the bottom of the power supply. Press and seat the plug keeper onto the body of the plug.

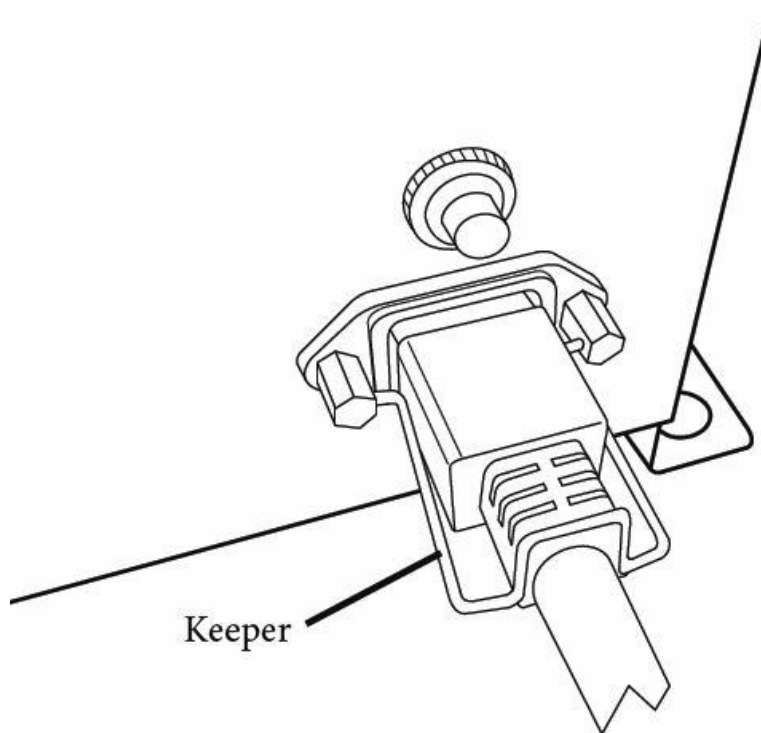
Now insert the AC power cord plug into a power outlet. The power supply is now powered.



CAUTION: The power supply is turned ON and OFF by plugging or unplugging the power cord plug at the AC wall outlet.

### Verifying TV Power and Signal

- Turn on each room TV and check for proper operation.
- Tune the TV to the output channel of the satellite or set top box. The modulated channel is usually channel 3 or 4.
- Operate the satellite or set top box and verify correct signal at the TV.



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## Troubleshooting Tips

SYMPTOM	POSSIBLE SOLUTION
TV does not operate	<ul style="list-style-type: none"> <li>• Make sure the power supply cord is plugged into the bottom of the unit.</li> <li>• Try another AC outlet.</li> <li>• Power is off to AC outlet. Check outlet circuit breaker.</li> <li>• Verify room coax is connected to the RFOUT F connector on the bottom row of the central power supply.</li> <li>• Wrong coax cable used - see <i>CATV Wiring</i>.</li> </ul>
Poor reception or No Picture	<ul style="list-style-type: none"> <li>• Station or Cable Company experiencing problems, tune set top box to another channel.</li> <li>• Check set top box connections. Check TV for proper channel.</li> <li>• Check for source of possible interference.</li> </ul>
Power supply output circuit breaker trips.	<ul style="list-style-type: none"> <li>• Shorted Coax. Check coax.</li> <li>• Shorted connection. Check set top box connections.</li> <li>• Wrong coax cable used - see <i>CATV Wiring</i>.</li> </ul>
Picture wobbles or drifts	<ul style="list-style-type: none"> <li>• Station or set top box problem. Tune to another channel.</li> <li>• Ground loop caused by poor grounding. Check set top box connections and grounds.</li> <li>• Wrong coax cable used - see <i>CATV Wiring</i>.</li> </ul>

### Limited Warranty

PDi Communication Systems Inc., (“PDi”) standard warranty information is found at [pdiam.com](http://pdiam.com). For information regarding authorized servicing and all other information pertaining to this warranty, please contact PDi COMMUNICATION SYSTEMS, INC. at 40 Greenwood Ln, Springboro, Ohio 45066 or phone 800-628-9870 and ask for the PDi ProServices team.