





Model H15 H-Type Power Conditioner

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Safety Information

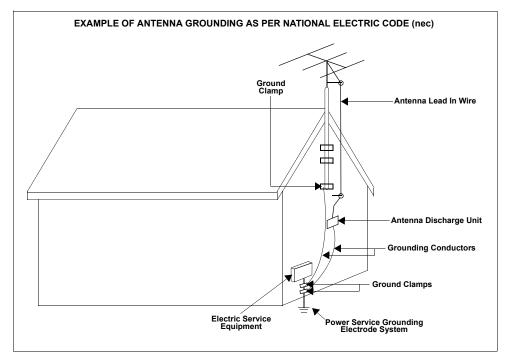
- Read this manual Read all of the safety and operating instructions before installing and operating this device.
- 2. **Keep this manual** Retain this manual, and all of the safety information that came with this device.
- 3. **Warnings** Comply with all warnings presented in this manual, as well as any found on the device.
- 4. **Follow Instructions** Follow all operating and use instruction.
- 5. **Cleaning** Unplug this device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a soft damp cloth for cleaning.

Note: A product that is meant for uninterrupted service and for some specific reason, such as the possibility of the loss of an authorization code for a cable TV converter, is not intended to be unplugged by the user for cleaning or any other purpose, may exclude the reference to unplugging this device.

- 6. **Water and Moisture** Do not use this product near any source of water, or in an environment where the relative humidity may exceed 95% (non-condensing).
- 7. **Placement** Do not install this device on any unsteady surface. Do not install this device on any heat source.
- 8, **Ventilation** Do not install this device in an area where the vents provided for cooling purposes, may become obstructed.
- 9. **Power** Ensure this device is connected to a properly grounded AC power source. Further ensure the device is plugged into a source providing the required 120 Vac. Do not use a plug adapter which defeats the ground pin of the AC plug.
- 10. **Polarization** This device has a polarized AC line plug having one blade wider than the other. This plug will only fit into the wall outlet in one orientation. This is a safety feature. Do not remove the round grounding pin, or use an adapter that defeats this safety feature.
- 11. Power Cord Ensure power cords are routed in a manner that will preclude them being pinched, frayed, or stepped on. After connecting other devices to this device, do not push the rear of the device up against any surface (wall or shelving unit), as this may create an undesired bend in the power cords which may break the wire strands of the cord.
- 12. **Antenna Grounding** Although this device provides protection against electrical surges, when connecting an outside antenna or cable system to devices connected to this device, ensure the antenna or cable system is grounded so as to provide additional protection against voltage surges and static charges in accordance with Section 810 of the National Electric Code, ANSI/NFPA No.70 (see illustration next page).
- 13. Other Grounding This device provides a grounding lug at the rear panel for grounding the device to an external Transient Voltage Surge Suppression (TVSS) device. Ensure this connection is made in accordance with the instructions provided by the TVSS device.
- 14. **Lightning** This device employs Metal Oxide Varisters (MOVs), and other circuitry to protect against lightning and other sources of voltage surges and sags. It is not necessary to turn this device or the devices connected to this device, off during a lighting storm.
- 15. **Power Lines** Do not locate outside antenna systems near overhead power lines, or other electric light or power circuits, or where it may fall or otherwise come in contact with these power sources. Do not allow the ladder being used, or the antenna itself to come into contact with these power sources, and such contact may be fatal.

Safety Information (continued)

- 16. **Overloading** Do not overload the wall outlet where this device is being connected. Do not overload this device. Ensure the total load to this device does not exceed that which is listed in the Specifications section of this manual.
- 17. **Openings** Do not push any object into the vents provided for cooling, as such an object may come into contact with high-voltage components and cause injury, death, or damage to the device. Do not allow liquids to enter any opening in this device.
- 18. **Servicing** There are no user-serviceable components within this device. Removal of any cover from this device may present a shock hazard, and/or void the warranty.
- 19. Damage Requiring Service If any type of damage occurs to this device, immediately disconnect it from the wall outlet. Do not use the Power switch or line cord into the rear of the device to disconnect power. Notify APC Technical Support or Customer Service at once.
- 20. **Replacement Parts** There are no components within this device that can or should be removed/replaced unless it is by an APC-qualified technician.
- Periodic Inspection Inspect the line cords, telephone/data cords, or DSS/Cable TV coaxial cables connected to this device to ensure they remain fully pushed in or attached.



Protect Your Investment

Thank you for selecting APC's Model H15 Power Conditioner. At APC, we know you have made an intelligent choice sure to reward you for many years. To ensure you receive all the benefits and protection that accompany your purchase, please take a few minutes to fill out and mail the enclosed Warranty Registration Card, or complete the online form at www.apc.com.

Note: Under California law, failure to register your purchase may not exclude you from provisions of the Warranty and Equipment Protection Policy.

Benefits of warranty registration are outlined below.

Registration

By registering your purchase now, it guarantees you will receive all the information and special offers you qualify for as the owner of this product.

Verification

By registering your purchase now, confirms your right to maximum protection under the terms and conditions of the Warranty, and Equipment Protection Policy.

Confirmation

By registering your purchase now, you have a way to confirm yourself as the owner of the product in the event of fire, theft or loss.

Safety Symbols



This "bolt of lightning" indicates uninsulated material within your unit may cause an electrical shock. For the safety of everyone in your home, please do not remove the product cover.



This "exclamation point" calls attention to features for which you should read about in this Manual to prevent operating and maintenance problems.

Warnings, Cautions and Notes

Warnings

Warnings provide information about a procedure which, if not done exactly as stated, may result in injury or death.

Cautions

Cautions provide information about a procedure which, if not done exactly as stated, may result in equipment damage.

Notes

Notes provide information which we feel is essential to highlight.

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Introduction

Congratulations on your purchase of APC's H15 Power Conditioner (Figure 1). This unit will protect your high performance audio and video (AV) system from damaging power surges, spikes and lightning. Protection is guaranteed. Isolated noise filter banks and Automatic Voltage Regulation (AVR) will eliminate power as a source of audio and video signal degradation. Data-line surge protection jacks will stop surges traveling over phone lines. Digital Satellite System, Cable Modem, and CATV Coaxial Cable lines are equally protected. With APC's H15 Power conditioner, you can enjoy your home theater experience with the peace of mind that performance is optimized and protection is guaranteed.



Figure 1. H15 Power Conditioner (Front View)

Proven Expertise...Proven Reliability

From corporate data centers to home offices, APC is regarded as an innovator, designer and manufacturer of high-quality power protection solutions. With a proven reputation for Legendary Reliability, leading companies depend on APC every day to protect and support many of the most critical networks in the world, including those at Microsoft, Toyota Motor Sales, Inc., and IBM. Over the last 20 years, APC has been a pioneer in the development of new power protection technologies that have resulted in countless industry awards, design patents and an installed-base numbering in the tens of millions of units. Multiple R&D centers, along with APC-owned and controlled factories ensure APC solutions are the safest, most advanced and reliable products available. When you buy APC, you buy "peace of mind".

Safety Precautions

Please ensure you have read and understand all of the safety information located at the front of this manual. If you have any questions about the safety information, or are concerned that your home may not be properly wired for this equipment, please contact APC Technical Support or a qualified and licensed electrician.

Package Contents

Your H15 Power Conditioner package includes the following:

- 1 Power Conditioner
- 1 Input Power Cord
- 2 Coaxial cables
- 1 Telephone cable
- 2 Rack-mount ears (used with a shelf and intended to hold the unit in place, not to support its full weight)
- 1 User manual
- 1 Equipment Protection Policy Sheet
- 1 Warranty Registration Card

If any items are missing, please contact APC Customer Service.

Unit Power Capacity

The H15 Power Conditioner is rated for 1440 Watts (continuous). It has been designed, however, to support component inrush currents that are much higher than its continuous power rating. The H15 is capable of supplying the dynamic peak current draws required by any component designed to work on a 15 amp circuit. Despite their nameplate power ratings, high performance AV equipment draw much less than their listed power ratings. The H15 can inform the user how much of the power capacity is available as equipment is connected to the unit

Features

Automatic Voltage Regulation (AVR)

The H15 is unique in that it provides AVR, which is engaged to correct low and high voltage conditions. In doing so, all equipment connected to the H15 are protected against these undesired voltage fluctuations, thus, prolonging the life of the equipment.

Surge Protection

The H15 Power Conditioner provides a high level of surge protection for the voltage going into the unit, thus protecting the devices connected to the unit. Additionally, surge protected coax/radio frequency (RF) connectors are protected against surges traveling over coaxial lines to protect your digital satellite system (DSS), CATV box, or cable modem. Similarly, the telephone line surge protection feature provides a protected splitter to allow output to a phone, modem, fax, digital video recorder (DVR), WebTV system, or pay-per-view cable TV function.

Isolated Noise Filter Banks (INFB)

The H15 also provides INFB technology to eliminate electromagnetic and radio frequency interference that can negatively impact sound and video quality.

DC Trigger

This feature works only with receivers that have DC triggering capabilities. For more information on how this works, or to find out if your system has this capability, please refer to the user's manual for your receiver.

CAUTION: When connecting to the DC Trigger jacks, connect the source of the DC trigger to the IN jack. The OUT jack should be used only as a pass-through. The DC Trigger signal can be short circuited if the input and output cables are reversed. The maximum input voltage for the DC Trigger is 30VDC. Do not apply an AC voltage to the DC trigger jacks. Failure to comply with this statement may result in equipment damage.

Sequenced Turn ON/OFF

Ensures that connected equipment is powered up or down in the proper order and with the right amount of delay between the stages. This feature helps you to eliminate any "popping" sounds coming from your speakers when you turn on your system. It allows you to program a delay into the sequence between 0 and 12 seconds. Please refer to the user's manual of your amplifier or receiver for more information on how much delay is required.

LCD Display and Unit Customization

The LCD displays important information including voltage in (line voltage) and voltage out, frequency, and load. Additionally, the LCD is used to program features such as the delay or dimmer settings. For convenience, all information provided in the display can be set to English, French, or Spanish.

Overload

The overload feature is designed to proactively notify the user if the unit and corresponding circuit are overloaded.

Removable Support Feet

Feet can be unscrewed and removed to save space when rack mounting.

Front Panel Controls and Indicators

The front panel controls and indicators for the H15 Power Conditioner are detailed in Figure 2. Each numbered callout refers to the numbered description found immediately below the picture.

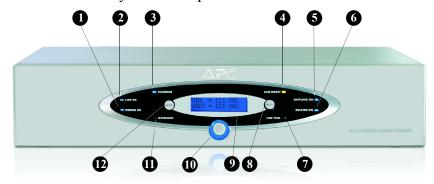


Figure 2. H15 Front Panel Controls and Indicators

Wiring OK Status Indicator

When lit, the receptacle into which the H15 is plugged is properly wired. If not lit, one of three wiring problems exists in the building wiring circuit: missing ground, overloaded neutral, or reversed polarity. An electrician should be consulted to resolve the problem.

2 Line OK Status Indicator

When lit, input voltage from the utility is within acceptable range. If not lit, input voltage from the utility is too far out of the acceptable range for the H10 and it will go into boost or trim mode to compensate for the low or high incoming line voltage.

3 Filtering Status Indicator

When lit, notifies the user that the EMI/RFI noise reduction circuit is active.

4 Line Boost Status Indicator

When lit, Automatic Voltage Regulation (AVR) is engaged to correct low input voltage conditions.

6 Switched On Status Indicator

When lit, the power is on at all outlets except those with a programmed delay.

6 Delayed On Status Indicator

When lit, power is 'on' at those outlets.

1 Line Trim Status Indicator

When lit, the Automatic Voltage Regulation (AVR) is engaged to correct high input voltage conditions.

8 Select Push Button

This push button is used to select various setup functions such as: Dimmer, AVR Range, Delay Time, Beeper, or Language (English, French, or Spanish).

Backlit LCD Display

Provides status information about the equipment plugged into the unit, as well as unit status. Information contained in the display can be viewed in English, French, or Spanish. The display and indicators can also be dimmed (using Dimmer menu), or can be completely darkened.

Note: The backlit display, as well as the LEDs, can be dimmed or turned off using the Setup push button and Dimmer function.

On/Off switch

Controls power to all 12 outlets. APC recommends the unit be left 'on' at all times.

(1) Overload Status Indicator

This indicator will illuminate when the unit is overloaded; unplug equipment connected to the unit until the indicator is no longer lit.

E Setup Push Button

This push button is used to show all information provided in the backlit LCD display, as well as set up various functions provided by the unit such as: Dimmer, AVR Range, Delay Time, Beeper, or Language (English, French, or Spanish).

Rear Panel Connectors and Circuit Breaker

The rear panel connectors for the H15 Power Conditioner are detailed in Figure 3. Each numbered callout refers to the numbered description found in the following pages.

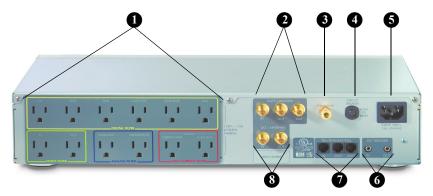


Figure 3. H15 Rear Panel Connectors

Note: All outlets provide surge protection, voltage regulation, and noise filtering.

AC-Powered Outlets

The H15 Power Conditioner provides for connection of up to twelve (12) AC-powered devices. The outlets are arranged according to the type of filtering protection provided for a given application. These Isolated Noise Filter Banks eliminate electromagnetic and radio frequency interference that can negatively impact sound and video quality. APC recommends you plug your devices into the outlets as marked, in order to assure optimum protection for your equipment. The outlets are further defined in the following:

Digital Filter Outlets provides filtering of the incoming AC power to protected your most sensitive digital devices (CD, DVD, DVR, CATV/SAT, Monitor, and AUX (one auxiliary digital device).

Note: Any digital device can be plugged into the digital outlets, any video device can be plugged into either of the video outlets, etc. Example, if you have a cable box and a satellite receiver, but no monitor, you can plug the cable box into the "CATV/SAT" outlet, and the satellite receiver into the "Monitor" outlet.

Video Filter Outlets provide filtering for your video devices (TV and VCR).

Analog Filter Outlets provide filtering for your analog-based equipment (Tuner/AUX and Preamp/Receiver).

High Current Filter Outlets provide filtering for your high-current devices (Subwoofer and Amplifier).

2 Surge Protected COAX/RF Connectors

The H15 provides a cable splitter for your CATV system or Cable Modem. The surge protection feature prevents surges traveling over Coaxial data lines from damaging the system. Connect the coaxial cable from the CATV or Cable Modem provider to the connector marked "IN", connect other cables from the connectors marked "OUT" to the device being protected (CATV box or Cable Modem).

3 System Ground Terminal

The H15 provides for the connection of grounding wires from all of your equipment to a central terminal lug. This ground connection eliminates ground loop problems; tie all component grounds to this screw to break any possible ground loops that can cause an audible 'hum'.

A Circuit Breaker

The H15 also provides a "press-to-reset" circuit breaker. When this breaker is "tripped" due to an electrical surge or overload, the device pops out and shuts down output power to the outlets. To reset the circuit breaker, push it straight inward.

Caution: When resetting the Circuit Breaker, push the button in quickly, and release the button. Do not hold the button inward. Failure to comply may result in equipment damage.

6 Input Power Connector

Connect one end of the supplied AC power cord to the H15 Input Power Connector, connect the other end to the AC utility power source (12 Amp, 120 Vac, 50-60 Hz).

6 DC Trigger jacks

When connected to a component acting as a DC trigger, that component controls turn on/off of the 'delayed' outlet banks. The H15 also allows that DC signal to pass through to another connected component.

CAUTION: When connecting to the DC Trigger jacks, connect the source of the DC trigger to the IN jack. The OUT jack should be used only as a pass-through. The DC Trigger signal can be short circuited if the input and output cables are reversed. The maximum input voltage for the DC Trigger is 30VDC. Do not apply an AC voltage to the DC trigger jacks. Failure to comply with this statement may result in equipment damage.

3 Surge Protected Telephone Jacks

The H15 provides a telephone line splitter with surge protection to protects components connected via telephone line. Connect the supplied RJ11 Telephone cable from the wall jack (source) to the telephone line connector marked "IN". Connect other telephone cables to the connectors marked "OUT A" and/or "OUT B" and then to the equipment to be protected (Telephone, DVR, DSS, or DSL).

8 Additional Surge Protected COAX/RF Connectors

The H15 also provides a surge protection for your DSS system or RF Antenna system. The surge protection feature prevents surges traveling over Coaxial cable from damaging the equipment. Connect the coaxial cable from the DSS or Antenna system to the connector marked "IN", connect another coaxial cable from the connector marked "OUT" to the device being protected (DSS or Antenna).

Installation

The installation of the H15 consists of the following steps:

- 1. Making Connections
- 2. Applying Power
- 3. Setting Up the H15

Making Connections

Note: Whenever the H15 is plugged into a utility AC power source, the microprocessor is active and the unit monitors the input power (standby mode).

Prior to connecting equipment to the H15 Power Conditioner, ensure the unit is functional by connecting the AC Power Cord (provided) at the rear panel (3), Figure 3). Once power is applied to the unit, the display provides the following messages:

- If the unit was in the ON state before the AC input went off, the unit will automatically turn on the outlets again when the input power is restored. The display menu will also be restored.
- If the unit was in the STANDBY state before the AC input went off, the unit will remain in the STANDBY state and there will be no LED or LCD display.

Note: Due to the unique filtering and surge protection provided by the H15, APC recommends connecting AV components as noted on the rear panel of the unit (Figure 3).

Connect your AV components as noted on the rear panel, and as defined in the section "*REAR PANEL CONNECTORS*". To ensure ground loops are eliminated, thus eliminating an audible hum through your speaker system, ground all AV components to the Ground System terminal located on the rear panel of the unit (3), Figure 3).

Applying Power

Apply power to the H15 by pressing the front panel Power Switch (②, Figure 1) fully inward, then releasing the switch. Once power is applied to the unit, the display shown in Figure 4 is illuminated.

Vin		121	Vac
Vout	=	121	Vac

Figure 4. Voltage In/Voltage Out Display.

Note: In the display shown in Figure 4, the input and output voltages are the same. (The actual voltage may vary depending on the power supplied by your utility.) In this case, both voltages are within acceptable ranges, thus, the H15 does not have to "clean up" the output voltage.

Setting Up the H15

Using the front panel **Setup** and **Select** push buttons (and and a in Figure 1) you can configure various functions provided by the H15 (Dimmer, AVR Range, Delay Time, Beeper, or Language (English, French, or Spanish)), as defined in the following paragraphs:

Dimmer Function — Allows you to set a brightness level for the Backlit Display, as well as the LEDs (Off, Dim 3, Dim 2, Dim 1, Normal, Bright 1, Bright 2, Bright 3). By pressing the **Setup** push button once, the display shown in Figure 5 is illuminated. Once the display is shown, repeatedly pressing the **Select** push button allows you to set the brightness of the display. Once the Display brightness is at the desired value, press the **Setup** push button to store that setting.



Figure 5. Dimmer Display

AVR Range Function - Allows you to adjust the AVR Range of the H15. APC recommends the following settings:

- "Wide" if the line voltage in your area is not stable.
- "Narrow" if the line voltage in your area is stable (generally around 120V).

Press the **Setup** push button until the "SET AVR RANGE?" menu is displayed as shown in Figure 6. Then press the **Select** push button to change the AVR Range setting. After you select the proper AVR Range setting, press the **Setup** push button to accept the setting.



Figure 6. AVR Range Display

The AVR Range adjustments have the following value:

- Narrow AVR Range: 102-132 Volts, Regulates to: 120 Volts ± 5%.
- Normal AVR Range: 97-139 Volts, Regulates to: 120 Volts ± 10%.
- Wide AVR Range: 92 145V, Regulates to: $120V \pm 15\%$.

Delay Time Function — Allows you to set the delay on/off time for the sequence delayed outlets. By pressing the **Setup** push button until the "SET DELAY TIME?" menu is displayed (Figure 7). Then press the **Select** push button to select the proper delay seconds (0-12 seconds). Press the **Setup** push button to store the setting.



Figure 7. Delay Time Display

Beeper Function — Allows you to enable or disable the beeper sound. Repeatedly press the **Setup** push button to advance to the "SET BEEPER?" menu (Figure 8). Press the **Select** push button to toggle the beeper between ON and MUTE. When enabled **(OK)**, a beeping sound is made each time the **Setup** or **Select** push buttons are pressed. When disabled **(Mute)**, the beep is turned off. Press the **Setup** push button to store the setting.

SET BEEPER ? <Others Yes>

Figure 8. Beeper Display

Language Function — Allows you to select the language for the LCD display. Repeatedly press the **Setup** push button to advance to the "SET LANGUAGE" display (Figure 9). Press the **Select** push button to select the language — English (Figure 10), French (Figure 11), or Spanish (Figure 12). Press the **Setup** push button to store the setting.

SET LANGUAGE	?
<0thers	Yes>

Figure 9. Set Language Display

Figure 10. English Select Display

Figure 11. French Select Display

```
↑ LANGUAGE =
<OK ESPANOL +->
```

Figure 12. Spanish Select Display

Using the SELECT Push Button

Pressing just the **Select** push button, allows you to view H15 status information (Power, V out and I out ("I" is the symbol for current), V in and FREQ, Serial Number and Firmware Version), as defined in the following paragraphs:

Power — The Power display (Figure 13) displays the power draw (how much capacity, as a percentage (%), is being used by the currently attached load).

Figure 13. Power Display

Vout / **Iout** — Pressing the **Select** push button again will cause the H15 to display the voltage output and the currently attached load in Amps (Figure 14).

Figure 14. Vout / Iout Display

Vin / Freq — Pressing the **Select** push button again will cause the H15 to display the voltage input and frequency (Figure 15).

Vin =	123 Vac
Freq =	60 Hz

Figure 15. Vin / FREQ Display

Serial Number and Firmware Version Display — Pressing the **Select** push button again will cause the H15 to display the Serial Number of the unit and the current Firmware Version (Figure 16). This information may be required by APC Technical Support, as well as any Warranty claims or Equipment Protection Policy claims.

SN: PF0511000123 Version: 0.1B.D

Figure 16. Serial Number and Firmware Version Display

Technical Specifications

The following table contains the specifications for the H15.

Item	Specification	
INPUT		
Input Voltage Range for Operation (on utility)	92V - 144V	
Nominal Voltage	120 Vac	
Allowable Input Frequency for Operation (on utility)	47 - 63 Hz	
Rated Input Current	12 Amps	
Input Circuit Breaker Rating	15 Amps	
OUTPUT		
Number of Outlets	12 (all outlets are surge protected, conditioned, and regulated)	
Output Regulation	+/- 5%, 10%, 15% for AVR Range = Narrow/Normal/Wide	
Outlet type	NEMA 5-15R	
Rated VA Capacity	1440VA	
Rated Watt Capacity (continuous)	1440 Watts	
Rated Output Current	12 Amps	
SURGE PROTECTION		
Let-Through Voltage Rating	<40 Volts	
Peak Surge Current (NM + CM)	250KA	
Data Line Protection Jacks (splitter)	Single-line 2-wire phoneline protection for phone, modem, or fax.	
Coax	5MHz-1GHz Two pairs (one with splitter)	
MISCELLANEOUS		
EMI/RFI Attenuation	40-100dB at 100KHz-30MHz	
Total Surge Joules	5200 Joules	

DC Trigger	Two 3.5mm mini-jack plugs
	(5-30V)

CAUTION: When connecting to the DC Trigger jacks, connect the source of the DC trigger to the IN jack. The OUT jack should be used only as a pass-through. The DC Trigger signal can be short circuited if the input and output cables are reversed. The maximum input voltage for the DC Trigger is 30VDC. Do not apply an AC voltage to the DC trigger jacks. Failure to comply with this statement may result in equipment damage.

Physical Dimensions (H x W x D)	3.75 x 17 x 9.5"
Unpackaged Weight Shipping Weight	16.7 lbs. 22.4 lbs.
Safety Agency Approvals	UL1449, cUL, FCC Part 68 Class B, NOM

Federal Communications Commission (FCC) Compliance Information

This device complies with Part 68 and Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device must not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. As required, the bottom of this equipment contains, among other information, the Registration Number and Ringer Equivalence Number (REN) for this equipment. If requested, this information must be provided to the telephone company.

Troubleshooting

This section describes possible causes and solutions for the following problems:

- 1. Unit will not turn on.
- 2. The overload LED is lit.
- 3. "Wiring OK Indicator" LED is not illuminated.
- 4. The Line Boost and Line Trim LEDs are flashing.

Unit will not turn on.

Probable Cause: Input power cord is not connected properly.

Solution: Ensure supplied power cord is connected firmly at both ends.

Probable Cause: No power or insufficient power available at the wall outlet.

Solution: Ensure the wall outlet has good power by using a voltmeter, or by plugging in another device.

Note: The unit will not turn on and accept incoming utility power if the power is out of range.

Probable Cause: Circuit Breaker has tripped.

Solution: Check both home and unit circuit breakers. If the circuit breaker located on the rear of the H10 has tripped, the center post will be extended outwards about a quarter to half inch. Push it back in to reset it. If the trip occurs again, reduce the amount of equipment plugged into the unit and try again. While the unit's breaker is rated for 15 Amps, National Electric Code (NEC) dictates that any particular home circuit should not be loaded more than 80% of its rating.

The overload LED is lit.

Probable Cause: Unit was overloaded.

Solution: There is an "Overload" LED on the front display panel which will light 'red' if the unit is overloaded. If the unit is overloaded or nearly overloaded (>95%), it is recommended that the load be reduced by unplugging one or more components.

"Wiring OK Indicator" LED is not illuminated.

Probable Cause: There are 3 reasons why this LED would not be illuminated:

- 1. Reversed polarity exists at the wall outlet.
- 2. Neutral wire is overloaded.
- 3. Earth ground is missing at the wall outlet.

Solution: Operating the unit under such conditions may impact its surge protection performance. Contact an electrician to have them inspect the building or home wiring to fix the problem.

Probable Cause: Unit is on but LEDs are turned off.

Solution: Push the Setup button, push the Select button two or three times. The LEDs should illuminate. Choose the dimmer setting (see the sections on "Front and Rear Panels" and "Setup the H10").

The Line Boost and Line Trim LEDs are flashing.

Probable Cause: One of the inner relays is welded.

Solution: Remove the input cord and then plug it in again. If the problem remains, contact APC.

APC Technical Support

If the problem remains unsolved:

- Contact APC Technical Support at 888-88APCAV, or
- Visit www.apcav.com