

# **INSTRUCTION MANUAL**



FOR ASSISTANCE OR REPAIR SERVICE CONTACT:



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PVL-15A/30A
PUBLIC ADDRESS
AMPLIFIER
15/30 WATTS RMS

# **WARNING**

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE. TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. TO PREVENT ELECTRICAL SHOCK. MATCH WIDE BLADE PLUG TO WIDE SLOT FULLY INSERTED.



This lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

#### CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

Warning: To reduce the risk of electric shock, do not remove cover (or back). There are no user-serviceable parts inside. Refer servicing to qualified service personnel.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

# **IMPORTANT SAFETY INSTRUCTIONS**

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 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) thar 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 the plugs, convenience receptacles, and at 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 the apparatus during lightning storm or when unused for long periods of time,
- 14. Refer all servicing to qualified 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, or apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. This appliance shall not be exposed to dripping or splashing water and no object filled with liquid such as vases shall be placed on the apparatus.
- 16. Caution-to prevent electrical shock, match wide blade plug to wide slot and fully insert.
- 17. Please keep a well ventilated environment around the entire unit.

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### PROFESSIONAL SERIES AMPLIFIER



PVL-15A, 30A

#### Welcome

Congratulation and thank you for purchasing PVL15A, 30A series, the multi function commercial amplifiers. These amplifiers are designed to provide quality sound reproduction and to produce the best and highest quality audio at an affordable price. We wish you great enjoyment and satisfaction when using your amplifier, whether you are installation, or reinforcement engineer.

# **Unpacking and Installation**

Although it is neither complicated to install nor difficult to operate your amplifier, a few minutes of your time is required to read this manual for a properly wired installation and familiarity with its many features. Please take great care in unpacking your amplifier and do not discard the carton or other packing materials. These may be needed when moving your amplifier and are required if it ever becomes necessary return your amplifier for service. Never place the unit near radiators, in front of heating vents, in direct sunlight, or in excessively humid or dusty location to avoid damage. Connect your complementary components as illustrated in the following page.

# **Packing List**

The unit was carefully checked before leaving the factory.

The Professional Series carton contains the following components:

- 1 Professional Series unit
- 1 User Manual

PVL-15A. 30A PVL-15A. 30A

### **SERVICE AND MAINTEANCE**

The use of solid state circuitry and advanced manufacturing techniques built in your unit results in very high reliability, and under normal operat - ing conditions, your amplifier should not require service other than an occasional external cleaning.

Keep the original carton and packing material to use if you need to return your unit for service. Merchandise to be returned for out-of-warranty or in- warranty repair requires prior written authorization. Please write or call toll free 1-800-645-5516 or in METRO NEW YORK 631-957-8700. We request you enclose a packing slip with the shipment that has a complete description of the problem and dated proof of purchase, if in warranty, when shipping the unit to the factory, please be sure to pack the unit well enough to withstand rough handling and use return shipping label supplied by Speco techologes. Ship the unit FREIGHT PREPAID, TO:

200 NEW HIGHWAY- P.O. BOX 726 AMITYVILLE, NEW YORK 11701-0726

When ordering parts, please give a description or the part number, if available. Direct your order to the PARTS DEPARTMENT.

We will then advise total cost for remittance including shipping and handling.



Speco technologies 200 New Highway P.O. Box 726 Amityville, N.Y. 11701-0726 U.S.A.

 $\mathsf{TEL}: 631\text{-}957\text{-}8700, \ 1\text{-}800\text{-}645\text{-}5516$ 

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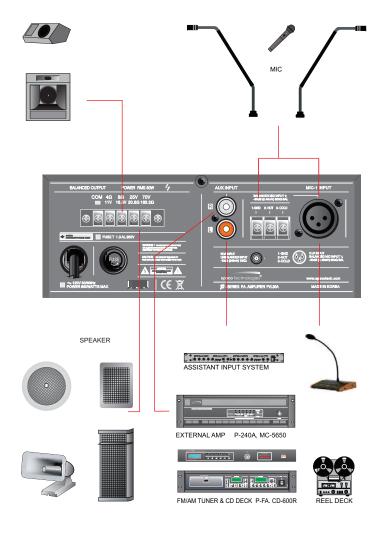
### **SPECIFICATIONS**

RMS POWER OUTPUT	30/60 Watts 30Hz to 20KHz, +/-3dB			
INPUT SENSITIVITY				
Mic. 1,				
Aux. 1,				
HUM & NOISE				
Mic. 1				
Mic. 2 Aux. 1,				
Aux. 1,	oud (Unbalanceu)			
TONE CONTROL	+/- 10dB Bass, Treble.			
SPEAKER OUTPUT	4, 8 ohms,			
	25V and 70V			
AC SUPPLY VOLTAGE	120V AC 50/6Hz			
Stand- by	10 Watts			
@Max. RMS Output	60/100 Watts			
CONTROLS	2 Mic. Vol.			
	1 Aux. Vol.			
	1 Piority push switch.			
	2 Tone Control			
	1 Power on/off switch			
DIMENSION (H x W x D)				
	3" x 7 3/2" x 7 3/3"			
WEIGHT	3.8Kg / 4.8Kg (8.4 lb/10.6 lb)			
NOTE; Specifications and design subject to change without notice.				

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### **CONNECTIONS**

Typical input and output wiring is shown in figure.



### **DESCRIPTION**

The PVL-15/ 30A is a rugged, dependable, 15W/30W public address amplifier This unit contains features generally found in much higher priced models and can be used with virtually any program source. The PVL-15/ 30A feature 2 microphone inputs. The 2 microphone inputs may be used for high or low impedance microphone. HI- Z microphone (over 1k ohm) input is for unbalanced operation Wireing LO- Z microphone (up to 600 ohm) input may be operated balanced or unbalanced. Mic-1 input may be use for priority paging. The unit has AUX input for use with radio tuners, tape decks or other high impedance, high output devices. The inputs are controlled by their individual volume controls. Outputs are provided for 4 and 8 ohms speakers and 25V and 70V constant voltage lines.

#### **CONTROLS**

#### FRONT PANEL CONTROLS

- a. The POWER SWITCH:
  - The Power switch is located at the extreme right hand side of the front panel When switching the amplifier on, the red switch will become illuminated
- MICROPHONE VOLUME CONTROL:
   Rotating the microphone controls clockwise increases the gain of the microphone inputs.
- c. AUX VOLUME CONTROL:
  - Rotating the AUX controls clockwise increases the gain of the AUX input.
- e. TONE CONTROL:
  - Rotating the Tone control clockwise increases the Bass/Treble and counter clockwise increase the Bass/Treble. Tone is flat at center.

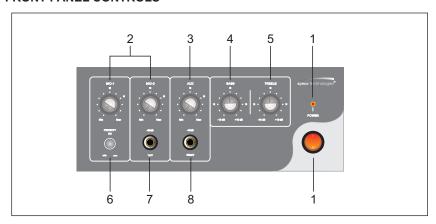
#### PRIORITY AND MUTING (VOX)

The Mic-1 priority switch will activate the priority circuit which temporarily mutes signals from other inputs,

PVL-15A. 30A 11 PVL-15A. 30A

#### **CONTROLS**

#### 1. FRONT PANEL CONTROLS



### 1. POWER SWITCH

When powering the amplifier on, the switch will illuminate.

#### 2. MIC VOLUME CONTROL

Rotating the microphone controls clockwise increases the gain of the microphone inputs.

#### 3. AUX VOLUME CONTROL

Rotating the AUX controls clockwise increases the gain of the AUX input.

#### 4. BASS CONTROL

This control is used for adjusting +/- 10db low frequency sound(100Hz)

#### 5. TREBLE CONTROL

This control is used for adjusting +/- 10db high frequency sound(10KHz)

#### 6. MUTING FOR PRIORITY SWITCH

Input to Mic 1 will automatically activate the priority circuit which temporarily mutes signals from other inputs, tuner or tape.

### 7. MIC-2 INPUT

LO-Z Balanced type  $2.45 \text{mV}/600\Omega$ 

#### 8. AUXILIARY INPUTS

HI-Z Unbalanced type 245mV/10K $\Omega$ 

#### INSTALLATION

#### 1. POWER:

The PLV-15/30 A Amplifier is to be operated from a AC120V 50/60Hz Power source. The power required for this amplifier is clearly indicated on the back panel.

#### 2. INPUT CONNECTIONS:

Make connections to the microphone (high or low impedance) and auxiliary inputs with the POWER SWITCH in the OFF position and set corresponding volume control to zero to avoid damage to the speakers and the amplifier from hum pickup. (Feedback)

#### a. MICROPHONE CONNECTIONS:

A Switch craft type A3M Microphone connector or equivalent is required for making connections to the Microphone inputs and audio shielded cable is required for all balanced and unbalanced microphone input connections.

BALANCED MICROPHONE INPUT CONNECTIONS(MIC. 1/2 only):

Using 2 conductor shielded cable, connect each of the two center conductors of the cable to prongs # 1and #2 of the A3M Microphone connector. Connect the shield of the cable to prong #1 of the A3M Microphone connector.

UNBALANCED MICROPHONE INPUT CONNECTIONS (MIC. #1 & #2):

Using single conductor shielded cable, connect the center conductor of the cable to prong #2 of the A3M Microphone connector.

Connect the shield of the cable to prong #1 of the A3M Microphone connector.

#### b. AUXILIARY INPUTS:

The auxiliary input receptacles and all other phono input require an 1/4" Type phono plug

(Cinch-jones #13A) or equivalent.

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#### **INSTALLATION OF SPEAKERS**

MODEL	4 OHM	80HM	25V	70V
PVL15A	7.7V	11V	41.7 OHM	327 OHM
PVL30A	11V	15.5V	21 OHM	163 OHM

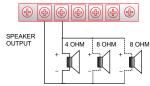
### Installation of the Speaker

When you connect the speaker, remove the AC cord from AC OUTLETS then connect the speakers as described below, after selecting the suitable terminal.

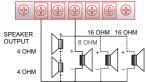
#### FOR LOW IMPEDANCE WIRING

FOR 40HM LINE

COM  $4\Omega$   $8\Omega$  25V 70V



FOR 80HM LINE COM  $4\Omega$   $8\Omega$  25V 70V



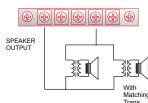
4 OHMS WIRING

8 OHMS WIRING

#### FOR HIGH IMPEDANCE WIRING

FOR 25V LINE

COM  $4\Omega$   $8\Omega$  25V 70V



COM 4Ω 8Ω 25V 70V

SPEAKER OUTPUT

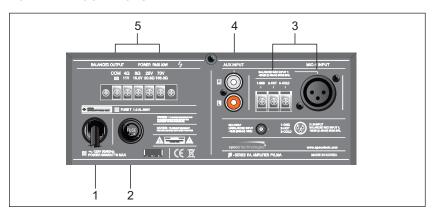
With Matching Trans

FOR 70V LINE

25V LINE WIRING

70V LINE WIRING

#### 1. BACK PANEL CONTROLS



#### 1. AC INLET

This is the AC INPUT for the AC INPUT CORD. CAUTION: Voltage Check!.

#### 2. FUSE HOLDER

This fuse holder contains the AC power fuse. Replace only with same type fuse when it is blown. If it continuously blows, stop replacing fuse and referservicing to qualified personnel.

MODEL	PVL-15A	PVL-30A
FUSE RATING	0.5A/250V	1A/250V

#### 3. MIC-1/2 INPUT

These are XLR or PL55 input and are designed for electrical balanced circuitry (XLR Mic-1, PL55 Mic-2)

### 4. AUX INPUT

The sound source (from CD Mp3 cassette deck etc.) is connected to this RCA input ( PVL30A only)

**Please note**: The rear inputs (#3 & #4) on the PVL30A are <u>alternatives</u> to the front inputs and must not be used simultaneously.

### 5. SPEAKER OUTPUT TERMINALS

These terminals are for speaker connection. Youcan select 4 ohm or 8 ohm or higher impedance lines 25V and 70V Be sure not to make the total impedance less than rated impedance on 25V or 70V. 4 ohm and 8 ohm must be matched exactly.

MODEL	4 OHMS	8 OHMS	25V	70V
PVL-15A	7.7V	11V	41.7 OHM	327 OHM
PVL-30A	11V	15.5V	21 OHM	163 OHM

<sup>\*</sup> Be sure not to make the total impedance less than rated impedance.

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<sup>\*</sup>Be sure that total impedance is not less than rated impedance. (See upper chart.)

#### **WIRING GUIDE**

## Choose input wire and connectors

HCA recommends using pre-built or professionally wired balanced line, 22 to 24 gauge cables. Figure shows connector pin assignments for wiring .The RCA input connections can also be used for unbalanced inputs

#### **XLR BALANCED WIRING GUIDE**

Input

#### output





#### Input output pin no:

1=ground/shield 2=hot(+ve) 3=cold(-ve)

For unbalanced use pin 1 and 3 have to be bridged

#### **BALANCED LINE**



MIC INPUT

ground

cold(-ve

#### **BALANCED LINE**



OUTPUT

#### **UNBALANCED LINE**

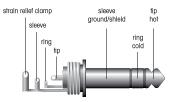


MIC INPUT

#### **UNBALANCED LINE**

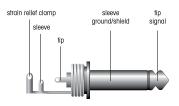


#### **Balances 1/4" Connector**



For connection of balanced and unbalanced pluas. ring and sleeve have to be bridged at the stereo plug

#### Unbanded 1/4" Connector



#### PVL-15A. 30A

### **OPERATION**

#### **POWER SWITCH**

VOX CONTROLS SWITCH

PRIORITY AND MUTING ON/OFF SWITCH



The POWER switch applies power to unit.

The switch will illuminate LED when power is on.

MAIN POWER SWITCH



Input to Mic-1 on switch will activate the priority circuit

#### INDIVIDUAL VOLUME CONTROLS



Each input is controlled by an individual volume control.

MIC AUX VOLUME CONTROLS

#### TONE CONTROL

The control section of center (1KHz) provides +/-0dB of the TREBLE and BASS range.

These frequency ranges are;

Bass 100Hz: +/-10dB Treble 10KHz: +/-10dB

### BAND FREQUENCY

#### TONE CONTROLS

#### FRONT MIC-2 AND AUX INPUT JACK



These jack(PL-55) are for AUX input. HI-Z Unbalanced type 245mV/10K $\Omega$ 

AUX JACK (PL55 TYPE 1/4")



### BACK MIC-2 AND AUX INPUT JACK

RCA INPUT UNBALANCED INPUT -20dB (245mV) 10KΩ







#### SPEAKER OUTPUT TERMINALS



PVL-15A COM  $4\Omega$   $8\Omega$  25V 70V PVL-30A

COM 4Ω 8Ω 25V 70V 11V 15.5V 20.8Ω 163.3Ω



**POWER CORD AND FUSE**