

NO LONGER IN PRODUCTION

**VP18R**  
**VOICE PROJECTOR**  
**PORTABLE PA SYSTEM**

---

---

**OPERATING INSTRUCTIONS**  
**and trouble-shooting guide**

---

---

**LECTROSONICS, INC.**

Rio Rancho, NM

## **INTRODUCTION**

The VP18R is a ultra-portable public address systems with a built-in rechargeable battery pack. This lightweight, highly portable unit is designed to be carried over the shoulder.

## **TABLE OF CONTENTS**

INTRODUCTION .....	2
GENERAL DESCRIPTION .....	3
RECHARGING .....	3
CONTROLS AND FUNCTIONS .....	4
OPERATING INSTRUCTIONS .....	5
TROUBLESHOOTING GUIDE .....	6
ACCESSORIES .....	7
SPECIFICATIONS .....	8
SERVICE AND REPAIR .....	9
RETURNING UNITS FOR REPAIR .....	9
WARRANTY .....	Back cover

## GENERAL DESCRIPTION

The VP18R is designed for “wide angle” sound coverage. The natural tone quality of the cone type speaker used in this unit is ideal for indoor applications. The VP18R will work fine outdoors, however, the audience coverage will be more limited than indoors.

The unit comes with a hand-held dynamic cardioid microphone, a 16-foot coiled microphone cord, carrying strap and charger. There is an optional “headset” microphone available which connects directly into the mini jack. This unit will also operate with a number of microphones offered by other manufacturers.

## RECHARGING

It is very important to charge the system for 12 to 15 hours before you begin your presentation, especially if the unit has been stored for several weeks or more.

To charge your unit, insert the plug on the CH-40 charger fully into the jack on the control panel and plug the charger into an 110V AC wall outlet. Make sure the charger is not plugged into an outlet that can be accidentally turned off by a switch.

The green LED next to the jack on the panel will stay lit as long as the charger is connected to the unit and to an AC power source. The charging light does not indicate whether or not the batteries are fully charged, it simply indicates that current is flowing through the charging circuit.

The unit requires two hours of charging or more for each hour of use. In most applications an overnight charge will provide a full day of operation. Continuous charging will not harm the battery pack, although it is not necessary.

## IMPORTANT

*Failure to observe the following precaution can result in premature battery failure.*

1. The nicad batteries in this unit should **never** be completely discharged or run down. Keeping the batteries fully charged when not in use is the best way to insure that the batteries will not fail in use or be permanently damaged.
2. For maximum battery life, the batteries in this unit should be charged before each use. Since the batteries self discharge during storage, always recharge the batteries before use if the unit has been stored for more than a month without being charged.

This type of battery failure is not covered by the warranty and will not occur if these simple precautions are followed.

## CONTROLS AND FUNCTIONS

The on/off switch on the microphone body controls only the microphone output. It does not switch the power on or off on the main unit. Current is being drained from the battery pack whenever the red indicator lamp is lighted.

### VOLUME - ON/OFF

This knob is used to switch the power on or off on the main unit. The **PWR** lamp will light when the unit is turned on, but does not indicate the charged status of the battery. It is more of a reminder to turn the unit off after use. It is also used to control the volume on the unit as well as the output volume of the **HI LEVEL OUT** jack.

### HI LEVEL IN

This jack may be used with line level or auxiliary outputs from tape decks, or other P.A. systems. Various cords are available from the factory or at almost any audio or electronics store. The volume level on this jack is preset at a fixed level, so you will have to adjust the loudness of a tape deck plugged into this jack with the volume control on the tape deck. The volume control knob on the Voice Projector will not affect this input.

### HI LEVEL OUT

This jack provides an output signal for line level or "AUX" inputs of tape recorders or other P.A. systems. This feature is particularly useful for recording auctions. The volume control on the unit will control the output volume of this jack so it is important to adjust the record level on your tape recorder after you have set the volume control on the Voice Projector. For tape recorders with an automatic level control, you will usually not have to make an adjustment. Be sure you connect the output of this jack to an "AUX" type of input on the tape recorder. Plugging into a "MIC" input will probably cause distorted sound.

### MINI JACK

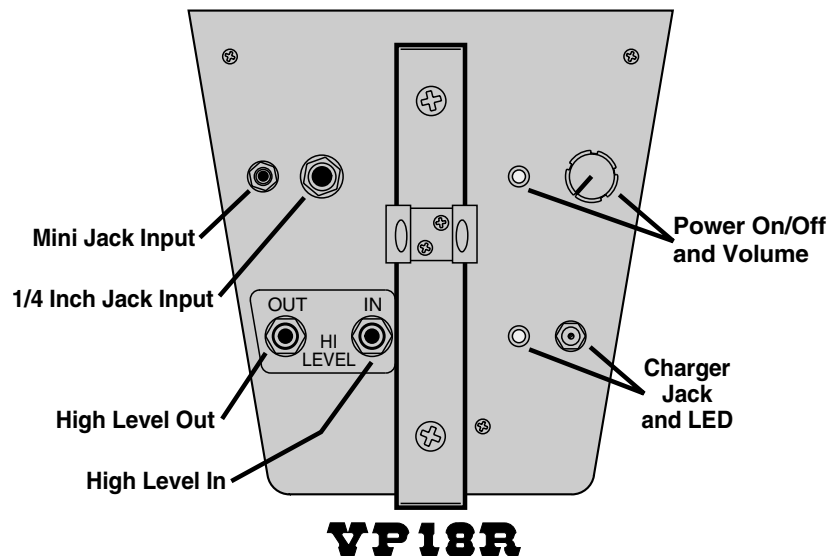
The VP18R offers a MINI JACK for electret microphones such as the HM142V headset models. This is the smaller "mini" jack on the control panel.

### 1/4 INCH JACK

This is for use with standard, low-impedance dynamic microphones. Be sure to insert the microphone plug fully into this jack for proper operation. You should feel two clicks when it is fully seated.

### CHARGING LAMP

This lamp will always be lit as long as the charger is plugged into the CH-40 CHARGER JACK.



## **OPERATING INSTRUCTIONS**

1. These systems are normally supplied with an M121S dynamic cardioid hand-held microphone. If you are using the hand-held microphone, insert one end of the microphone cord into the microphone, and the other end of the cord into the 1/4 INCH JACK on the control panel.
2. If you are using a Lectrosonics headset microphone, plug it into the MINI JACK on the control panel. The MINI JACK provides "phantom power" required to operate the headset model microphone.
3. Rotate the volume control clockwise to turn the power on, and leave it set for minimum volume (counterclockwise). The POWER LAMP on the main unit will light up when the unit comes on.
4. Turn the switch on the hand-held microphone on by sliding it toward the pickup end of the microphone. If you are using the headset microphone, rotate the white volume control knob on the headband fully clockwise.
5. Hold the hand-held microphone so that it is pointed toward your mouth at a distance of 2" to 6" from the lips. With the headset, adjust the miniature "gooseneck" so that the pickup element in the end of the boom is just to one side of your mouth - not directly in front of your mouth.
6. While speaking into the microphone, adjust the volume control on the unit until clear sound is heard at the most distant point a listener is expected. Setting the volume higher than necessary increases the chance of "feedback" occurring, and may also cause distortion of the sound. The distance between your mouth and the microphone affects the loudness of the system and the required volume control setting - the closer the microphone is to your mouth the louder the sound will be. Try to keep the microphone at a constant distance from your mouth as you use the system.
7. Use the shoulder strap provided to carry the unit at waist level. You may use it facing forward if you are facing a crowd or carry it with the speaker facing backwards if you are giving a tour and the crowd is following you.
8. Place the unit on top of something at least five feet tall if you prefer having the unit in a stationary location rather than carrying it over the shoulder. Place the unit between you and the crowd. Feedback may occur if you stand in front of the unit with the microphone.

---

## TROUBLESHOOTING GUIDE

BEFORE GOING THROUGH THE FOLLOWING CHART, BE SURE THE BATTERY PACK IS FULLY CHARGED. The POWER LAMP should light up when the unit comes on. The POWER LAMP will grow dim as the batteries discharge. Because of the nature of nicad batteries, the batteries may fail during use or be permanently damaged by the time the POWER LAMP is dim enough for you to notice a change. Keep the batteries fully charged when not in use to insure long battery life. Continuous charging will not harm the battery pack, although it is not necessary. In extreme cases a continuous charge of two to three days may be necessary to restore a deeply discharged battery pack. If the battery pack still will not except a charge after two to three days then the pack will need to be replaced. See page 2 for charging instructions.

It is important to follow these steps in the sequence listed.

**SYMPTOM****POSSIBLE CAUSE**

---

**POWER LAMP NOT ON**

- 1) Equipment turned off. Check Volume - On/Off control.
- 2) Battery pack discharged. Recharge unit.

---

**CHARGING LAMP NOT ON WITH CHARGER  
PLUGGED INTO CHARGING JACK**

- 1) CH-40 not plugged into 110v supply.
- 2) 110V supply switched off or defective. Check 110VAC outlet for voltage by plugging in a lamp or other AC device.
- 3) CH-40 charger defective.

---

**NO SOUND FROM SPEAKER**

- 1) Volume turned down. Check Volume - On/Off control.
- 2) Mic not plugged in.
- 3) Mic muted. Check mute switch on microphone body.
- 4) Defective mic or cable.

---

**INTERMITTENT AUDIO OR "CRACKLING"  
SOUND FROM SPEAKER**

- 1) Defective mic or cable. Try different mic and cable.
- 2) Dirty cable plugs. Clean cable ends with clean alcohol and a clean soft cloth. A brand new cord stored in a sealed container such as a plastic bag will give off a gas that forms a coating on the plugs ("outgassing"). This coating can cause improper contact when the plug is connected to the jack on the equipment. It will appear that the cord is defective. It is a good idea to clean the cord periodically, and after the system has been stored. Clean the plugs with alcohol and a clean cloth.

---

**DISTORTED SOUND FROM SPEAKER**

- 1) Volume set too high. Reduce volume control.
- 2) Excessive wind noise or breath "pops". Use windscreen on mic.
- 3) Batteries very low. As the batteries discharge you have to turn up the volume. When the volume knob is turned all the way up and you're still not getting much volume out of the system, the amplifier is being driven to its limit so it produces a distorted sound.

---

**EXCESSIVE FEEDBACK**

- 1) Volume too high. Reduce volume control.
- 2) Microphone too far from sound source (requiring the volume to be turned up to compensate). Speak closer to the mic or move mic closer to sound source.
- 3) Microphone too close to, or directly in front of, the horn or speaker. As mentioned in the operating instructions on page 4, the unit should be placed between you and the crowd. If you stand in front of the unit while you use it, feedback can occur. This problem is easily solved by moving behind the unit.

## ACCESSORIES

<u>Part. No.</u>	<u>Description</u>
CH-40	Replacement charger
MC-16C	Coiled microphone cord; 1/4" male to male (extends to 16 ft.)
MM-16	Straight 16 ft. microphone cord
RK-51	Foam windscreen for hand-held microphones
RM-121S	Hand-held cardioid dynamic microphone
14040	Replacement strap for VP18R

## SPECIFICATIONS

<b>Power:</b>	10 Watts RMS
<b>Distortion:</b>	Less than 1%
<b>Frequency response:</b>	50 Hz to 20 kHz $\pm$ 1dB
<b>Equivalent input noise:</b>	-127dBv
<b>Speaker:</b>	Full range, 6-inch dual-cone speaker
<b>Power Supply:</b>	18 Volt, rechargeable Nicad battery pack provides up to 27 hours of operation between charges. CH-40 charger is included with system.
<b>Microphone:</b>	M121S hand-held cardioid microphone with on-off switch and MC-16C 16-foot coil cord standard. May also be used with the HM142V headset model microphones.



## SERVICE AND REPAIR

If your system malfunctions, you should attempt to correct or isolate the trouble before concluding that the equipment needs repair. Make sure you have followed the setup procedure and operating instructions. Check out the interconnecting cords and then go through the TROUBLE SHOOTING section in the manual

We strongly recommend that you **do not** try to repair the equipment yourself and **do not** have the local repair shop attempt anything other than the simplest repair. If the repair is more complicated than a broken wire or loose connection, send the unit to the factory for repair and service. Don't attempt to adjust any controls inside the units. Once set at the factory, the various controls and trimmers do not drift with age or vibration and never require readjustment. **There are no adjustments inside that will make a malfunctioning unit start working.**

LECTROSONICS service department is equipped and staffed to quickly repair your equipment. In-warranty repairs are made at no charge in accordance with the terms of the warranty. Out of warranty repairs are charged at a modest flat rate plus parts and shipping. Since it takes almost as much time and effort to determine what is wrong as it does to make the repair, there is a charge for an exact quotation. We will be happy to quote approximate charges by phone for out of warranty repairs.

## RETURNING UNITS FOR REPAIR

You will save yourself time and trouble if you will follow the steps below:

- A.** DO NOT return equipment to the factory for repair without first contacting us by letter or by phone. We need to know the nature of the problem, the model number and the serial number of the equipment. We also need a phone number where you can be reached 8 am to 4 pm (Mountain Standard Time).
- B.** After receiving your request, we will issue you a return authorization number (R.A.). This number will help speed your repair through our receiving and repair departments. The return authorization number must be clearly shown on the outside of the shipping container.
- C.** Pack the equipment carefully and ship to us, shipping costs prepaid. If necessary, we can provide you with the proper packing materials. UPS is usually the best way to ship the units. Heavy units should be "double-boxed" for safe transport.
- D.** We also strongly recommend that you insure the equipment, since we cannot be responsible for loss of or damage to equipment that you ship. Of course, we insure the equipment when we ship it back to you.

**Mailing address:**  
Lectrosonics, Inc.  
PO Box 15900  
Rio Rancho, NM 87174  
USA

**Shipping address:**  
Lectrosonics, Inc.  
581 Laser Rd.  
Rio Rancho, NM 87124  
USA

**Telephones:**  
Regular: (505) 892-4501  
Toll Free (800) 821-1121  
FAX: (505) 892-6243

**World Wide Web:** <http://www.lectrosonics.com>

**Email:** [sales@lectrosonics.com](mailto:sales@lectrosonics.com)

## LIMITED ONE YEAR WARRANTY

The equipment is warranted for one year from date of purchase against defects in materials or workmanship provided it was purchased from an authorized dealer. This warranty does not cover equipment which has been abused or damaged by careless handling or shipping. This warranty does not apply to used or demonstrator equipment.

Should any defect develop, we will, at our option, repair or replace any defective parts without charge for either parts or labor. If we cannot correct the defect in your equipment, we will replace it at no charge with a similar new item. We will pay for the cost of returning your merchandise to you.

This warranty applies only to items returned to us, shipping costs prepaid, within one year from the date of purchase.

This warranty gives you specific legal rights. You may have additional legal rights which vary from state to state.

### **LECTROSONICS, INC.**

---

581 LASER ROAD  
RIO RANCHO, NM 87124 USA

July 7, 1999