



KRAMER ELECTRONICS LTD.

# USER MANUAL

MODEL:

**SPK-WA511**  
On-Wall Active Speakers

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P/N: 2900-3001 12 Rev 3

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# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Getting Started</b>	<b>2</b>
2.1	Achieving the Best Performance	2
<b>3</b>	<b>Overview</b>	<b>3</b>
<b>4</b>	<b>Defining the SPK-WA511</b>	<b>5</b>
<b>5</b>	<b>Installing the Speakers</b>	<b>7</b>
5.1	Choosing the Best Location	7
5.2	Installing the Speaker Wires	7
<b>6</b>	<b>Technical Specifications</b>	<b>9</b>

# Figures

Figure 1:	Active On-Wall Speakers in a Home Theater Setup	4
Figure 2:	Active On-Wall Speakers in a Conference Room Setup	4
Figure 3:	SPK-WA511 Active Speaker	5
Figure 4:	Connecting the Active Speaker to the Passive Speaker	7

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# 1 Introduction

Welcome to Kramer Electronics! Since 1981, Kramer Electronics has been providing a world of unique, creative, and affordable solutions to the vast range of problems that confront video, audio, presentation, and broadcasting professionals on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better!

Our 1,000-plus different models now appear in 11 groups that are clearly defined by function: GROUP 1: Distribution Amplifiers; GROUP 2: Switchers and Routers; GROUP 3: Control Systems; GROUP 4: Format/Standards Converters; GROUP 5: Range Extenders and Repeaters; GROUP 6: Specialty AV Products; GROUP 7: Scan Converters and Scalers; GROUP 8: Cables and Connectors; GROUP 9: Room Connectivity; GROUP 10: Accessories and Rack Adapters and GROUP 11: Sierra Products.

Congratulations on purchasing your Kramer **SPK-WA511** *On-Wall Active Speakers*, which are ideal for the following typical applications:

- Boardrooms
- Conference rooms
- Educational classrooms
- Presentation venues
- Home theater

The package includes one of each of the following items:

- A pair of **SPK-WA511** Active Speakers
- An RCA cable (2 meters)
- A speaker cable for connecting the active speaker to the passive speaker (4 meters)
- An AC power cord (3 meters)
- A pair of U-shaped rotating mounting brackets with 4 mounting bracket screws
- This user manual

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## 2 Getting Started

We recommend that you:

- Unpack the equipment carefully and save the original box and packaging materials for possible future shipment
- Review the contents of this user manual
- Use Kramer high-performance high-resolution cables



Go to <http://www.kramerelectronics.com> to check for up-to-date user manuals, application programs, and to check if firmware upgrades are available (where appropriate).

### 2.1 Achieving the Best Performance

To achieve the best performance:

- Use only good quality connection cables (such as the Kramer BC-2S) to avoid interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables)
- Do not secure the cables in tight bundles or roll the slack into tight coils
- Avoid interference from neighboring electrical appliances that may adversely influence signal quality
- Position your Kramer **SPK-WA511** away from moisture, excessive sunlight and dust



To ensure that you obtain the best sound results, do not open the housing of the passive speaker or the active speaker.

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## 3 Overview

The **SPK-WA511** is a powered two-way speaker system designed for indoor wall mounting. The system accepts a line level stereo input and amplifies it using a built-in amplifier and outputs a speaker signal to the passive speaker.

The **SPK-WA511** speaker system features:

- Three available inputs (that can either be connected separately or connected simultaneously to form a mix of the inputs) that consist of:
  - A Line level unbalanced stereo audio input on a 3.5mm mini jack connector
  - A balanced stereo audio input on a 5-pin terminal block connector
  - An unbalanced stereo audio input on two RCA connectors
- An output to external amplified or non-amplified speakers
- An output to an external sub-woofer
- A unique looping output, letting you chain additional pairs of active and passive speakers
- TREBLE, BASS and VOLUME control knobs
- A control panel on the back of the active speaker that controls all the functions of both speakers
- A magnetic shield
- Enhanced bass reflex design
- An integrated 2x30W stereo amplifier (no external amplifier required)
- A self adjusting power range of 90 to 240V AC
- Auto-power shutoff

The **SPK-WA511** is enclosed in an ABS cabinet and can be mounted indoors on the wall, vertically or horizontally. The mounting brackets are made of hardened steel that attach to each speaker, letting you rotate each speaker to the left or right.

[Figure 1](#) and [Figure 2](#) show examples of how the speakers can be installed in conference room and home theater setups, respectively.

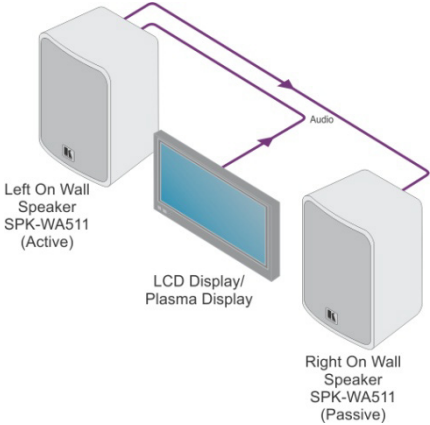


Figure 1: Active On-Wall Speakers in a Home Theater Setup

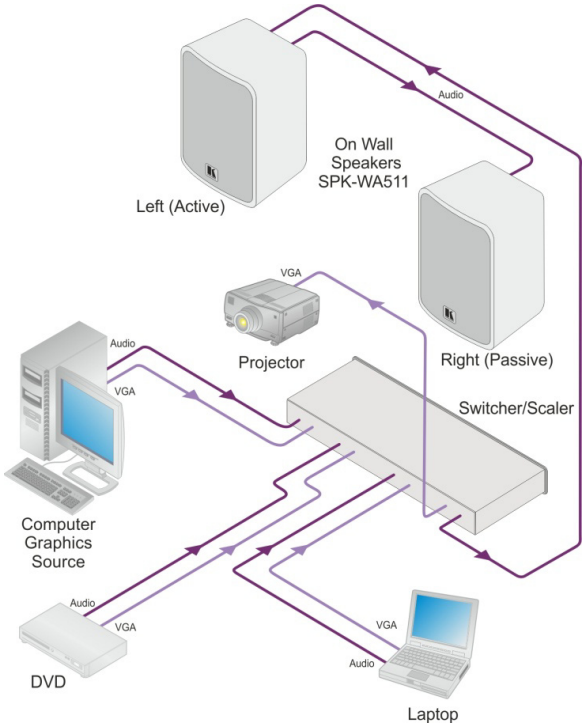


Figure 2: Active On-Wall Speakers in a Conference Room Setup



## 4 Defining the SPK-WA511

This section defines the active **SPK-WA511**:

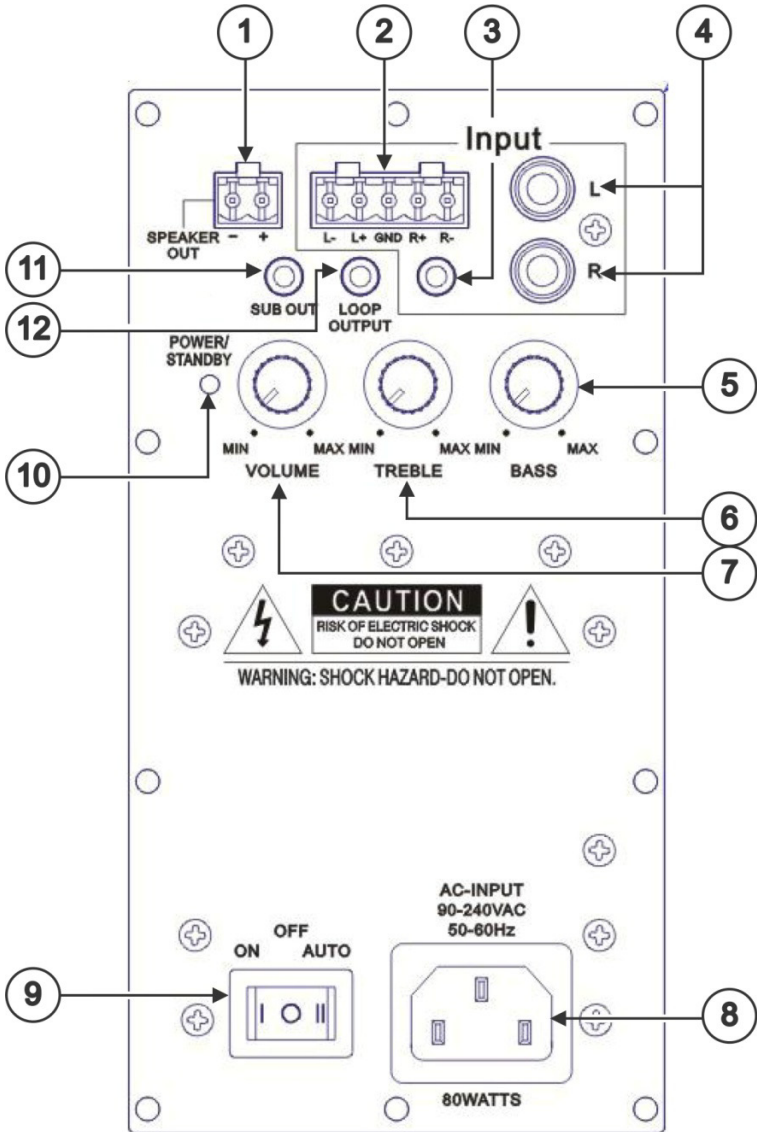


Figure 3: SPK-WA511 Active Speaker

#	Feature		Function
1	SPEAKER OUT Connectors		Connect the active speaker to the (+) and (-) stereo sockets on the passive speaker The L speaker is active and the R speaker is passive
2	INPUT Connectors	5-pin Terminal Block	Connect the audio source to one or more of the input connectors
3		3.5mm Mini Jack	
4		L and R RCA	
5	BASS Control Knob		Rotate the button to control the bass
6	TREBLE Control Knob		Rotate the button to control the treble
7	VOLUME Control knob		Rotate the button to adjust the audio volume
8	AC-Input Power Supply (self adjusting)		Connect to the AC power cord
9	POWER Switch		For turning the unit ON (I), OFF (0) or AUTO shutoff (II) When selecting the AUTO shutoff mode, the speaker enters the standby mode when idle for over 10 minutes
10	POWER/STANDBY LED		Illuminates in green when powered (POWER switch set to ON or AUTO) illuminates in red when in the standby mode (POWER switch is set to AUTO) In the AUTO mode, the LED illuminates green if an input signal is detected and illuminates red if idle for over 10 minutes
11	LOOP OUTPUT 3.5mm Mini Jack Connector		Connect to another pair of active speakers
12	SUB OUT 3.5mm Mini Connector		If required, connect an active sub-woofer to this output for maximum bass reproduction

## 5 Installing the Speakers

This section explains how to:

- Choose the best location for your speakers (see [Section 5.1](#))
- Install the speaker wires (see [Section 5.2](#))

### 5.1 Choosing the Best Location

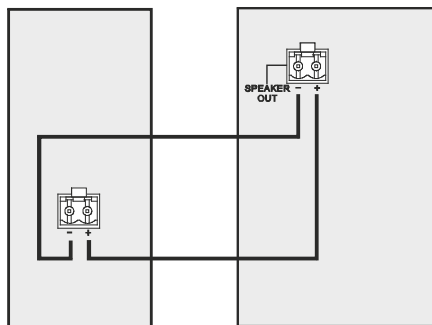
Before installing the speakers:

- Experiment by placing the speakers in different locations before finally deciding on the most suitable location
- Be sure that the wall type is appropriate for the mounting brackets, that is, either solid wood, bricks, concrete, hollow building blocks, or wood studs. You cannot mount the brackets on gypsum walls
- Check that the mounting location is free of obstructions, such as electrical piping, AC ducts or water lines, and so on

### 5.2 Installing the Speaker Wires

To install the speakers, do the following:

1. Connect the + and - stereo sockets of the active speaker to the + and - stereo sockets of the passive speaker using the cable supplied, as follows:



Passive Speaker (R)

Active Speaker (L)

Figure 4: Connecting the Active Speaker to the Passive Speaker

2. Connect the audio source (for example, a CD or a DVD player and so on) to one of the INPUT connectors on the active speaker.
3. Connect the power.
4. Adjust the volume on the input source.
5. Adjust the volume control on the rear side control panel.
6. Adjust the bass and treble control on the rear side control panel.
7. If required, connect an additional set of speakers by connecting the LOOP OUTPUT connector to the input of a second active speaker.
8. If required, mount the speaker on the wall via the removable mounting brackets. To do so:
  - Mark the location of the mounting holes
  - Screw the mounting screws (not included in the package) into the mounting holes
  - Slide the mounting bracket over the mounting screws so that the mounting bracket is secured to the surface

## 6 Technical Specifications

Audio and Power	
DESCRIPTION:	2-way Bass Reflex active cabinet speaker
HIGH FREQUENCY DRIVER:	1/2" MYLAR dome tweeter
LOW FREQUENCY DRIVER:	5 1/4" Polypropylene cone with rubber edge woofer
IMPEDANCE:	4Ω
DISPERSION COVERAGE:	130° @2000Hz
CROSSOVER FREQUENCY:	8000Hz
NOMINAL SENSITIVITY:	85dB SPL @1m, 1W
DAMPING FACTOR:	>100 @ 8Ω/400Hz
DIRECTIVITY FACTOR (Q):	5.8 (averaged 100Hz – 10kHz); 6.6 (2kHz)
DIRECTIVITY INDEX (DI):	7.6dB (averaged 100Hz – 10kHz); 8.2dB (2kHz)
SPL MAX PEAK:	110dB
FREQUENCY RESPONSE:	45Hz to 20kHz
S/N RATIO:	> 83dB
THD:	< 0.2%
BUILT IN POWER AMPLIFIER:	2x30W RMS
CONTROLS:	Volume, bass and treble
STANDBY MODE POWER CONSUMPTION:	0.7W
INPUTS SIGNAL FOR SYSTEM "WAKE-UP" FROM STANDBY MODE:	+8mV - +11 mV
INPUT CONNECTORS:	Line level unbalanced stereo audio on a 3.5mm mini jack Line level balanced stereo audio on a terminal block connector Line level unbalanced stereo audio on left and right RCA connectors
OUTPUT CONNECTORS:	Speaker (to connect to the external passive speaker) 3.5mm mini jack lineout for optional sub-woofer Looping output on a 3.5mm mini jack
POWER SOURCE:	90–240V AC 50/60Hz (self adjusting)
Shipping and Installation	
MATERIALS:	Frame, grill and brackets steel; cabinet ABS
WEIGHT PER SINGLE SPEAKER:	Active Speaker: 2.7kg (5.95lbs) approx. Passive Speaker 2.2 kg (4.85lbs) approx.
WEIGHT WITH MOUNTING KIT:	Active Speaker: 3.1kg (6.83lbs) approx. Passive Speaker: 2.6kg (5.73lbs) approx.
SHIPPING WEIGHT (FOR PAIR):	6kg (13.23lbs) approx.
DIMENSIONS:	18.3cm x 17cm x 24.4cm (7.2" x 6.7" x 9.6") W, D, H
DIMENSIONS with mounting brackets:	18.3cm x 17.2cm x 26.5cm (7.2" x 6.8" x 10.4") W, D, H
INSTALLATION CLEARANCE:	Front panel to wall (with mounting bracket): 22cm (8.7in) Back panel to wall (with mounting bracket): 4.5cm (1.8in)
ACCESSORIES:	1 pair of U-shaped rotating mounting brackets with 4 mounting bracket screws, 3m (9.84ft) power cord, 4m (13.12ft) loudspeaker cable and a 2m (6.6ft) 3.5mm to 2 RCA cable
COLORS:	Available in white or black
Specifications are within a 10% tolerance and are subject to change without notice at <a href="http://www.kramerelectronics.com">http://www.kramerelectronics.com</a>	

## LIMITED WARRANTY

The warranty obligations of Kramer Electronics for this product are limited to the terms set forth below:

### What is Covered

This limited warranty covers defects in materials and workmanship in this product.

### What is Not Covered

This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by Kramer Electronics to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product. This limited warranty does not cover cartons, equipment enclosures, cables or accessories used in conjunction with this product.

Without limiting any other exclusion herein, Kramer Electronics does not warrant that the product covered hereby, including, without limitation, the technology and/or integrated circuit(s) included in the product, will not become obsolete or that such items are or will remain compatible with any other product or technology with which the product may be used.

### How Long Does this Coverage Last

One year as of this printing; please check our Web site for the most current and accurate warranty information.

### Who is Covered

Only the original purchaser of this product is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or owners of this product.

### What Kramer Electronics will do

Kramer Electronics will, at its sole option, provide one of the following three remedies to whatever extent it shall deem necessary to satisfy a proper claim under this limited warranty:

1. Elect to repair or facilitate the repair of any defective parts within a reasonable period of time, free of any charge for the necessary parts and labor to complete the repair and restore this product to its proper operating condition. Kramer Electronics will also pay the shipping costs necessary to return this product once the repair is complete.
2. Replace this product with a direct replacement or with a similar product deemed by Kramer Electronics to perform substantially the same function as the original product.
3. Issue a refund of the original purchase price less depreciation to be determined based on the age of the product at the time remedy is sought under this limited warranty.

### What Kramer Electronics will not do Under This Limited Warranty

If this product is returned to Kramer Electronics or the authorized dealer from which it was purchased or any other party authorized to repair Kramer Electronics products, this product must be insured during shipment, with the insurance and shipping charges prepaid by you. If this product is returned uninsured, you assume all risks of loss or damage during shipment. Kramer Electronics will not be responsible for any costs related to the removal or re-installation of this product from or into any installation. Kramer Electronics will not be responsible for any costs related to any setting up this product, any adjustment of user controls or any programming required for a specific installation of this product.

### How to Obtain a Remedy under this Limited Warranty

To obtain a remedy under this limited warranty, you must contact either the authorized Kramer Electronics reseller from whom you purchased this product or the Kramer Electronics office nearest you. For a list of authorized Kramer Electronics resellers and/or Kramer Electronics authorized service providers, please visit our web site at [www.kramerelectronics.com](http://www.kramerelectronics.com) or contact the Kramer Electronics office nearest you.

In order to pursue any remedy under this limited warranty, you must possess an original, dated receipt as proof of purchase from an authorized Kramer Electronics reseller. If this product is returned under this limited warranty, a return authorization number, obtained from Kramer Electronics, will be required. You may also be directed to an authorized reseller or a person authorized by Kramer Electronics to repair the product.

If it is decided that this product should be returned directly to Kramer Electronics, this product should be properly packed, preferably in the original carton, for shipping. Cartons not bearing a return authorization number will be refused.

### Limitation on Liability

THE MAXIMUM LIABILITY OF KRAMER ELECTRONICS UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID FOR THE PRODUCT. TO THE MAXIMUM EXTENT PERMITTED BY LAW, KRAMER ELECTRONICS IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY. Some countries, districts or states do not allow the exclusion or limitation of relief, special, incidental, consequential or indirect damages, or the limitation of liability to specified amounts, so the above limitations or exclusions may not apply to you.

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### Other Conditions

This limited warranty gives you specific legal rights, and you may have other rights which vary from country to country or state to state.

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**We welcome your questions, comments, and feedback.**

Web site: [www.kramerelectronics.com](http://www.kramerelectronics.com)

E-mail: [info@kramerel.com](mailto:info@kramerel.com)



**SAFETY WARNING**

Disconnect the unit from the power supply before opening and servicing



P/N: 2900-300112



Rev: 3