

**VIKING**

# TECHNICAL Practice

**TELECOM SOLUTIONS FOR THE 21ST CENTURY**

**SA-1S**  
Infrared Remote  
Controllable Ceiling  
Speaker for SA-Series

March 17, 2014

## **Infrared Remote Controllable Ceiling Speaker for SA-Series Self-Amplified Paging System**



The Viking model **SA-1S** is an 8 inch paging speaker that has a built in 1.5 watt power amplifier, an infrared remote control detector, and an integrated digital volume control, all built into an attractive off-white grill for flush mounting in office ceilings. The **SA-1S** self amplified paging speaker uses a proprietary two wire protocol in which both 40 volts DC power and audio are combined on the

same pair of wires. It is designed for direct connection to the Viking Model **SA-25** Self Amplified Paging Control unit, or use the Viking model **SA-X12** expander/adapter to connect it to virtually any existing paging system.

The **SA-1S** speaker includes an infrared receiver to accept volume control signals from a Viking Model **SA-IR** remote control. Aim the infrared transmitter at the speaker and press the buttons. The up/down buttons allow users to set the appropriate volume level for each speaker. The speaker provides an audible “beep” feedback tone to let the user gauge the volume level even when there’s no background music (or page) playing at the time.

### **Features**

- 8 inch paging speaker
- Built-in 1.5 watt power amplifier
- Infrared remote control detector
- Digital volume control
- Users set their own volume levels to suit the noise levels in the area
- Allows users to totally mute the speaker
- Audible feedback “beep” to set the proper volume

### **Applications**

- Speakers for Viking’s **SA-25** control unit
- Add to any existing paging system using the **SA-X12**
- Small business offices
- Doctor’s offices
- Conference rooms

### **Specifications**

**Power:** Viking’s proprietary **SA Series** 2 wire (40VDC + audio) protocol

**Dimensions:** 324mm x 95mm (12.75” x 3.75”)

**Shipping Weight:** 1.36kg (3lbs)

**Environmental:** 0°C to 32°C (32°F to 90°F) with 5% to 95% non-condensing humidity

**Frequency Response:** 150Hz to 5kHz

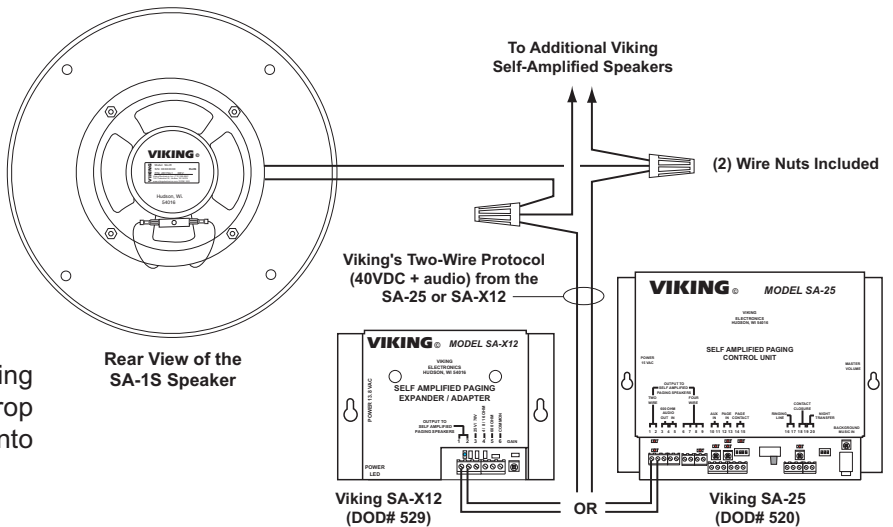
**Phone...715.386.8861**

**<http://www.vikingelectronics.com>**

# Wiring

Connect **SA-1S** remote controllable ceiling speakers only to the Viking **SA-25** Self Amplified Paging System control unit or use the Viking **SA-X12** Self Amplified Paging System expander/ adapter to connect to any other existing paging system. Follow the instructions in the **SA-25** and/or **SA-X12** technical practices for recommended wire gauge size and wire run lengths based on the number of speakers to be installed.

**Installation:** Mounting hardware for the ceiling speakers is included for easy installation in drop ceilings or speaker enclosures. Flush mount into an 8.25" to 10.0" diameter hole.



# Operation

Infrared remote control is one of several features that set Viking's self amplified paging system ahead of older legacy Valcom and Bogen systems. The older 4 wire systems required the installer to pull twice as much wire to each speaker, and then have to walk around with a ladder to manually set the volume of each speaker to hopefully the proper level. If the user decides the speakers should have a different volume level, its back up the ladder to adjust more pots.

With the Viking **SA Series** 2 wire self amplified paging system, the installer can connect all the self amplified paging speakers to the same pair of wires, and then simply show the user how to use the **SA-IR** infrared remote control to individually adjust the volume of each speaker.

The convenience of having infrared remote controlled ceiling speakers in an existing paging system can be realized by using the Viking Model **SA-X12** expander/adapter, which will convert any paging audio source (600 ohm, 4 ohm, 8 ohm, 16 ohm, 25 volt, or 70 volt) to Viking's proprietary **SA Series** 2 wire protocol. Each **SA-X12** can power up to twelve (12) **SA-1S** and/or **SA-1H** self amplified paging speakers.

# Warranty

**IF YOU HAVE A PROBLEM WITH A VIKING PRODUCT, PLEASE CONTACT: VIKING TECHNICAL SUPPORT AT (715) 386-8666**

Our Technical Support Department is available for assistance Monday 8am - 4pm and Tuesday through Friday 8am - 5pm central time. So that we can give you better service, before you call please:

1. Know the model number, the serial number and what software version you have (see serial label).
2. Have your Technical Practice in front of you.
3. It is best if you are on site.

## RETURNING PRODUCT FOR REPAIR

The following procedure is for equipment that needs repair:

1. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (RA) number. The customer MUST have a complete description of the problem, with all pertinent information regarding the defect, such as options set, conditions, symptoms, methods to duplicate problem, frequency of failure, etc.
2. Packing: Return equipment in original box or in proper packing so that damage will not occur while in transit. Static sensitive equipment such as a circuit board should be in an anti-static bag, sandwiched between foam and individually boxed. All equipment should be wrapped to avoid packing material lodging in or sticking to the equipment. Include ALL parts of the equipment. C.O.D. or freight collect shipments cannot be accepted. Ship cartons prepaid to: **Viking Electronics, 1531 Industrial Street, Hudson, WI 54016**
3. Return shipping address: Be sure to include your return shipping address inside the box. We cannot ship to a PO Box.
4. RA number on carton: In large printing, write the R.A. number on the outside of each carton being returned.

## RETURNING PRODUCT FOR EXCHANGE

The following procedure is for equipment that has failed out-of-box (within 10 days of purchase):

1. Customer must contact Viking's Technical Support at 715-386-8666 to determine possible causes for the problem. The customer MUST be able to step through recommended tests for diagnosis.
2. If the Technical Support Product Specialist determines that the equipment is defective based on the customer's input and troubleshooting, a Return Authorization (R.A.) number will be issued. This number is valid for fourteen (14) calendar days from the date of issue.
3. After obtaining the R.A. number, return the approved equipment to your distributor, referencing the R.A. number. Your distributor will then replace the product over the counter at no charge. The distributor will then return the product to Viking using the same R.A. number.
4. **The distributor will NOT exchange this product without first obtaining the R.A. number from you. If you haven't followed the steps listed in 1, 2 and 3, be aware that you will have to pay a restocking charge.**

## TWO YEAR LIMITED WARRANTY

Viking warrants its products to be free from defects in the workmanship or materials, under normal use and service, for a period of two years from the date of purchase from any authorized Viking distributor. If at any time during the warranty period, the product is deemed defective or malfunctions, return the product to Viking Electronics, Inc., 1531 Industrial Street, Hudson, WI., 54016. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (R.A.) number.

This warranty does not cover any damage to the product due to lightning, over voltage, under voltage, accident, misuse, abuse, negligence or any damage caused by use of the product by the purchaser or others. This warranty does not cover non-EWP products that have been exposed to wet or corrosive environments. This warranty does not cover stainless steel surfaces that have not been properly maintained.

**NO OTHER WARRANTIES. VIKING MAKES NO WARRANTIES RELATING TO ITS PRODUCTS OTHER THAN AS DESCRIBED ABOVE AND DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.**

**EXCLUSION OF CONSEQUENTIAL DAMAGES:** VIKING SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE TO PURCHASER, OR ANY OTHER PARTY, FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL OR EXEMPLARY DAMAGES ARISING OUT OF OR RELATED TO THE SALE OR USE OF THE PRODUCT SOLD HEREUNDER.

**EXCLUSIVE REMEDY AND LIMITATION OF LIABILITY:** WHETHER IN AN ACTION BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR ANY OTHER LEGAL THEORY, ANY LIABILITY OF VIKING SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT, OR AT VIKING'S OPTION, REFUND OF THE PURCHASE PRICE AS THE EXCLUSIVE REMEDY AND ANY LIABILITY OF VIKING SHALL BE SO LIMITED.

IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT EACH AND EVERY PROVISION OF THIS AGREEMENT WHICH PROVIDES FOR DISCLAIMER OF WARRANTIES, EXCLUSION OF CONSEQUENTIAL DAMAGES, AND EXCLUSIVE REMEDY AND LIMITATION OF LIABILITY, ARE SEVERABLE FROM ANY OTHER PROVISION AND EACH PROVISION IS A SEPARABLE AND INDEPENDENT ELEMENT OF RISK ALLOCATION AND IS INTENDED TO BE ENFORCED AS SUCH.

Due to the dynamic nature of the product design, the information contained in this document is subject to change without notice. Viking Electronics, and its affiliates and/or subsidiaries assume no responsibility for errors and omissions contained in this information. Revisions of this document or new editions of it may be issued to incorporate such changes.