SAMSON



RESUL/SE

OWNER'S MANUAL

## **Table of Contents**

Introduction
Features
Front Panel Layout
Rear Panel Layout
Connecting the Resolv Monitors
Positioning your Studio Monitors
Connecting an Active Subwoofer
Specifications
Resolv SE Series Connections

### Introduction

Thank you for purchasing a Resolv SE series studio reference monitor from Samson Technologies! The Resolv studio monitors are active speakers that incorporate internal biamplied power and electronic crossovers for optimal tonal balance and precise performance. Each speaker features a 1.25" neodymium, soft-dome tweeter with ferrofluid cooling, mounted in a waveguide in the center of the front baffle. This combination of components provides a precise high frequency response, and a wide listening area. To deliver an accurate mid-range and tight low end, our engineers have carefully voiced each model utilizing glass-fiber low-frequency drivers with butyl surrounds. This ensures even stereo imaging without hyped frequency response. The cabinets are constructed out of medium density fiberboard (MDF) with internal bracing to create a rigid enclosure which reduces vibration and increases performance. The edges of the cabinets are rounded to reduce cabinet-edge diffraction.

The Resolv SE monitors have been designed as near-field monitors ideal for use in studios, video post-production suites, fixed installations, or as playback speakers. They are also well-suited to be part of a multi-channel audio system.

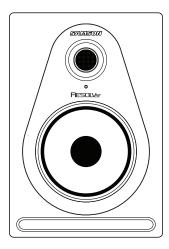
In these pages, you'll find a detailed description of the features of the Resolv SE5, SE6, and SE8 models, as well as a guided tour through the control panel, and instructions for setup and use. You'll also find a warranty card enclosed—please don't forget to fill it out and mail it in so that you can receive online technical support, and so that we can send you updated information about these and other Samson products, in the future.

We recommend you record your serial number in the space provided below for future reference.

Serial number:	
Date of purchase:	

With proper care and maintenance, your Resolv studio monitor will operate trouble-free for many years. Should your speaker ever require servicing, a Return Authorization (RA) number must be obtained before shipping your unit to Samson. Without this number, the unit will not be accepted. Please call Samson at 1-800-3SAMSON (1-800-372-6766) for an RA number prior to shipping your unit. Please retain the original packing materials and, if possible, return the unit in its original carton. If your Resolv monitor was purchased outside of the United States, contact your local distributor for warranty details and service information. Also, be sure to check out our website (www.samsontech.com) for information about our full product line.

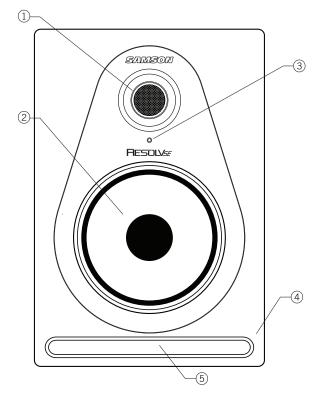
### **Features**



The Samson Resolv SE series reference monitors provide smooth, accurate response for any mixing or critical listening situation. Here are some of their main features:

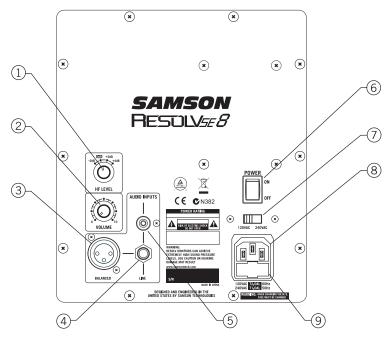
- Two-way, bass-reflex, active studio monitor providing extremely accurate monitoring for recording studio, post-production or multi-media applications
- 1.25" soft-dome tweeter provides extended, accurate high frequency response with minimal distortion
- Tweeter waveguide designed to provide accurate, even dispersion of high-frequency content for flat on- and off-axis listening areas
- Powered by an internal amplifier specifically designed for optimal performance and maximum SPL. The SE5 has 70 watts of total power, while the SE6 and SE8 have 100 watts of total power
- Four-position High Frequency Level control allows the listener to contour the response curve to custom tailor the response that works best in their mixing environment
- Active electronic crossover utilizing a multi-pole design for linear frequency response unaffected by signal level
- Tight and controlled low frequency response produced by magnetically shielded, woven carbon fiber woofers with butyl surround and heavy-duty motor structures with large voice coils
- Extremely rigid, MDF (Medium Density Fiberboard) construction, delivering maximum SPI

### **Front Panel Layout**



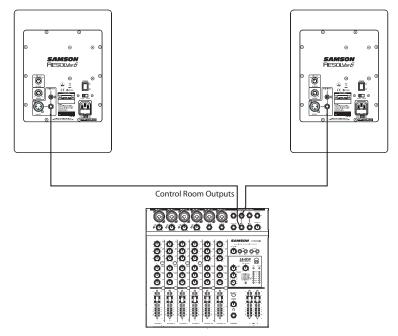
- Tweeter 1.25" silk-dome tweeter with ferrofluid-cooled neodymium magnet provides a natural reproduction of high frequencies while minimizing distortion resulting in a clear, precise and sweet top end
- Woofer Woven carbon fiber, copolymer butyl surround woofers provide each monitor with tight and controlled mid- and low-frequency response
- Power Indicator White LED illuminates indicating the unit is powered on and ready for operation
- 4. **Enclosure** Solid MDF construction and internal damping maximizes acoustic efficiency
- 5. **Bass Reflex Port** Front-firing port provides minimal port turbulence and enhances the linear extended low frequency response

### **Rear Panel Layout**



- 1. **HF LEVEL** Four-position rotary switch used to adjust the high frequency response. Setting the switch to OdB (factory setting) produces a flat response. The -2dB, +2dB and +4dB adjusts a high frequency shelf above 4kHz. Your room acoustics or listening material will determine the appropriate setting for your application.
- 2. **VOLUME** Controls the amount of overall output level.
- 3. **XLR Input (SE6 and SE8 only)** Connect a balanced, +4dBu, line level signal here via standard XLR (microphone) cable.
- 4. ¼" Input Connect a balanced, +4dBu, line level signal here via a TRS (Tip, Ring, Sleeve), or unbalanced TS (Tip, Sleeve) ¼"cable.
- 5. **RCA Input –** Used to connect signals from unbalanced, –10dBV devices.
- 6. **POWER Switch** Use this switch to turn the speakers on and off. When powered on, the front panel LED will light.
- Voltage Switch Used to select the operating voltage.
  NOTE: Be sure to check that the voltage setting and fuse rating are correct for your country.
- 8. **AC Inlet** Connect the supplied IEC power cable here.
- Fuse Holder Holds the mains fuse. To replace the fuse, remove the power cable and pry the fuse holder open using a flat head screwdriver.
   NOTE: Never remove the fuse while the speakers are plugged in.

### **Connecting the Resolv Monitors**



The Resolv SE series monitors are the perfect addition to any project studio. When connecting your monitors to a mixer, you should utilize the control room outputs of your mixer so that you can independently control the level to the speakers without affecting the main mix output. Follow the simple steps and diagram in this section to quickly connect your monitors using a standard recording console's control room outputs.

- 1. Lower your mixer's master outputs until they are completely off.
- 2. Connect the mixer's Left Control Room output to the left-side Resolv SE Series LINE INPUT and the mixer's Right Control Room output to the right-side Resolv SE Series LINE INPUT. The Resolv SE series connections can be made via one of the three rear panel Audio Inputs. You can use RCA inputs for unbalanced, -10dBV level signals, or either the ¼" or XLR (SE6 & SE8 only) inputs for balanced, +4dBu level signals.

Note: Before plugging in and powering on the untis, remember the "last on, first off" rule of power amplifiers (and powered monitors). When powering up your system, be sure that all the wires are connected, turn your mixer and any other outboard gear on, and then finally turn your Resolv SE Series on.

- 3. Set the Resolv SE Series input Volume control to the 12-o'clock (center detent) position.
- 4. Run an audio signal (such as music from a CD) through your mixer and raise the Control Room level to a comfortable listening volume.

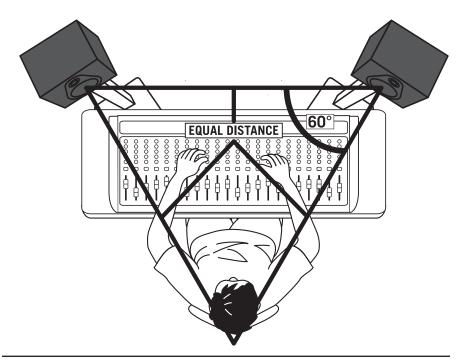
### **Positioning your Studio Monitors**

#### Positioning the Resolv SE Series

Near field (close to the listener) monitoring has become the choice of many engineers because of the cost and complexities associated with mounting monitors onto the walls. Positioning your studio monitors correctly is very important. Correct placement not only creates the proper stereo image, but also minimizes the effects of your room's reflections. This is especially important in today's project studios since the budget for room acoustics is often close to nothing. By taking some time and using your ears when setting up your monitors, you can create an optimal listening environment.

The most important consideration when evaluating room acoustics is the presence of reflective surfaces near the monitoring area. These can include flat tabletops, glass mirrors or framed pictures, large open walls and even the surface of your mixing console. Most reflecting sound will eventually reach the listening position, but since it is slightly delayed from the direct source, the result is random cancellation of some frequencies, or comb filtering. If possible, remove any and all reflective surfaces. You may also want to hang some acoustic foam on walls near the monitors.

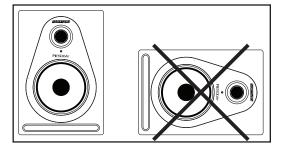
When positioning the monitors, you'll want to set up what is commonly referred to as the "mix triangle" (shown below). In this ideal configuration, the space between the left and right monitor is equal to the distance from the listener to each monitor, forming an equilateral triangle.



### **Positioning your Studio Monitors**

#### **Speaker Orientation**

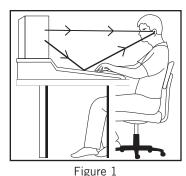
A major objective when setting up your studio monitors is to obtain the best possible stereo image. The Resolv SE monitors are designed to be used in a vertical position, with the tweeter and woofer symmetrically in line. Placing the speaker on its side will cause an offset in sound

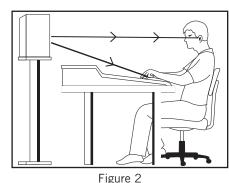


between the woofer and the tweeter, limiting your ability to find optimal listening positions.

#### A Moment of Reflection

When setting the height of your monitor system, be careful to avoid reflections off the surface of the mixing console. These reflections arrive at the listening position slightly delayed from the original sound, resulting in cancellations and overall unpredictable response (Figure 1). Visualize straight lines representing the beams of sound radiating from the monitors and choose a height that reduces the occurrence of reflections that will end up in the prime listening spot. In most cases, the ideal position is slightly behind and above the mixing console's meter bridge (Figure 2). Always use your ears to find the best positioning for your room. Using monitor stands will assist in placing the speakers in the appropriate position.





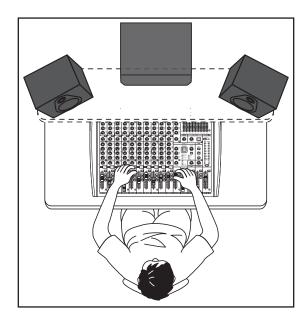
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### **Connecting an Active Subwoofer**

The Resolv SE monitors are designed to be full-range speakers, but occasionally you may need to hear the extreme low end. Adding an active subwoofer to extend the low frequency response of your monitor system can be beneficial when mixing your music, for example. Typically, it is best to set the subwoofer level to be equal to that of the Resolv SE main speakers.

Because deep-bass frequencies are non-directional, it is difficult for our ears to locate the sound source, and the precise placement of the subwoofer is not as critical as the main speakers. The ideal location is between the two main speakers. If you notice there are frequencies that sound quieter than others, move the subwoofer slightly to the left or right. If the subwoofer has a polarity switch, try setting the switch to the opposite phase setting to see if this provides an improved low frequency response.

To incorporate a subwoofer into your monitor system, connect Left and Right Control Room outputs of your mixer to the active subwoofer's line inputs. Then connect the subwoofer's line outputs to the Resolv SE series left and right speakers. Run an audio signal (such as music from a CD) through your mixer and raise the level to a comfortable listening volume. Finally, adjust the crossover frequency control (if applicable) of the subwoofer to the desired frequency.



### Resolv SE Studio Monitors

**Specifications** 

Model		SE5
Woofer		5" woven carbon fiber
Tweeter		1.25" Silk Dome
Enclosure Type		2-way Bass Reflex System
Enclosure		Vinyl wrapped 3/4" (18mm) MDF cabinet with painted front baffle
Frequency Response		45Hz - 27kHz +/-3dB
Crossover Frequency		3.19kHz 24dB/oct Linkwitz-Riley
Output Power	HF	20 Watts RMS
	LF	50 Watts RMS
Input Connectors	Unbalanced	RCA
	Balanced	1/4" TRS Phone
Input Impedance		10k ohm
Controls		VOLUME Control HF LEVEL (-2dB, OdB, +2dB, +4dB)
Power Consumption		125W
Fuse		100V - 120V T1.6AL (slow blow) 220V - 240V T800mAL (slow blow)
Dimensions (L x W x H)		8" x 8.6" x 12.3" 204mm x 218mm x 312mm
Weight		15.25lbs 6.9kg

# **Specifications**

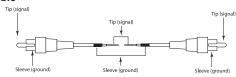
SE6	SE8
6.5" woven carbon fiber	8" woven carbon fiber
1.25" Silk Dome	1.25" Silk Dome
2-way Bass Reflex System	2-way Bass Reflex System
Vinyl wrapped 3/4" (18mm) MDF cabinet with painted front baffle	Vinyl wrapped 3/4" (18mm) MDF cabinet with painted front baffle
40Hz - 27kHz +/-3dB	30Hz - 27kHz +/-3dB
3.19kHz 24dB/oct Linkwitz-Riley	3.19kHz 24dB/oct Linkwitz-Riley
25 Watts RMS	25 Watts RMS
75 Watts RMS	75 Watts RMS
RCA	RCA
XLR, 1/4" TRS Phone	XLR, ¼" TRS Phone
10k ohm	10k ohm
VOLUME Control HF LEVEL (-2dB, OdB, +2dB, +4dB)	VOLUME Control HF LEVEL (-2dB, OdB, +2dB, +4dB)
175W	175W
100V - 120V T2.0AL (slow blow) 220V - 240V T1.0AL (slow blow)	100V - 120V T2.0AL (slow blow) 220V - 240V T1.0AL (slow blow)
9.3" x 9.9" x 13.6" 236mm x 251mm x 346mm	11.2" x 12" x 16.25" 285mm x 304mm x 413mm
18lbs 8.2kg	25lbs 11.4kg

### **Resolv SE Series Connections**

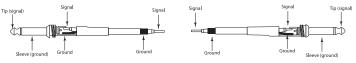
### **Resolv SE Series Wiring Guide**

There are several ways to interface the Resolv SE Series, depending on your exact monitoring set-up. Follow the cable diagrams below for connecting your monitor system.

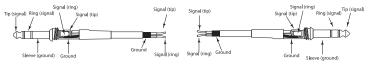
#### **RCA to RCA Cable**



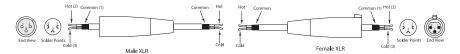
#### Unbalanced ¼" to ¼" Cable



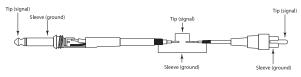
### Balanced 1/4" to 1/4" Cable



#### XLR to XLR Cable



#### Unbalanced 1/4" to RCA



#### XLR to RCA

