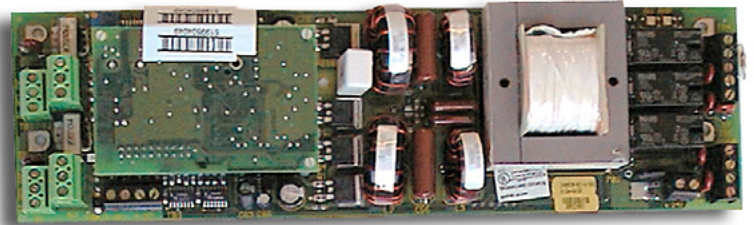


# Intelligent Audio Amplifiers

SIGA-AA30, SIGA-AA50



## Overview

SIGA amplifiers are high efficiency switch mode audio amplifiers available in 30 and 50 watt sizes. Amplifiers have two input channels supporting dual channel or single channel audio applications. Amplifier project application flexibility is enhanced by provision for input levels at 1Vrms or 25Vrms. This allows SIGA amplifiers to obtain their input from a line level signal or the output of another 25Vrms amplifier. This feature provides great application flexibility helping meet project requirements. Input channel selection is made through system software programming transmitted to the amplifier via a Signature data circuit. This reduces wiring interconnect requirements by reducing the number of control modules needed.

Each amplifier has provision for connecting back up amplification. Amplifiers can be backed up one-to-one or multiple amplifiers can have one shared back up amplifier. In addition to back up amplifiers each SIGA amplifier has an on board 1kHz tone generator that can activate in the event of input failure or if no back up amplifier is available.

## Standard Features

- Remote or Local mounting
- Two channel input
- Connects to signature data circuit. Allows switching between two channels without additional control modules. Eliminates the need for additional amplifier monitoring.
- Output selectable as 25Vrms or 70Vrms
- Dual input level allows the use of a 1Volt or 25Volt input signal.
- Back up amplifier connection
- Back up 1kHz tone generator

## Application

Signature amplifiers are ideally suited for distributed audio applications and small centrally banked applications. The audio output is configurable as 25Vrms or 70Vrms in Class B or Class A wiring configurations. Speakers can connect directly to the output of the amplifier or the amplifier output can run as an audio riser to signature modules where speaker zone selection is made. Each amplifier has a built in 1kHz tone generator and provision for a back up amplifier. Should an amplifier lose its input signal the output will switch to a back up amplifier. If there is no back up amplifier or the output from the back up is unavailable the output will receive the internal 1kHz tone as the evacuation signal. On board status LEDs provide quick visual indication of amplifier status including, Power Amp. Enabled, Backup Mode, Amplifier Active, and Normal Communications.

**Detection & alarm since 1872**

U.S.  
T 888-378-2329  
F 866-503-3996

Canada  
Chubb Edwards  
T 519 376 2430  
F 519 376 7258

Southeast Asia  
T : +65 6391 9300  
F : +65 6391 9306

India  
T : +91 80 4344 2000  
F : +91 80 4344 2050

Australia  
T +61 3 9239 1200  
F +61 3 9239 1299

Europe  
T +32 2 725 11 20  
F +32 2 721 86 13

Latin America  
T 305 593 4301  
F 305 593 4300

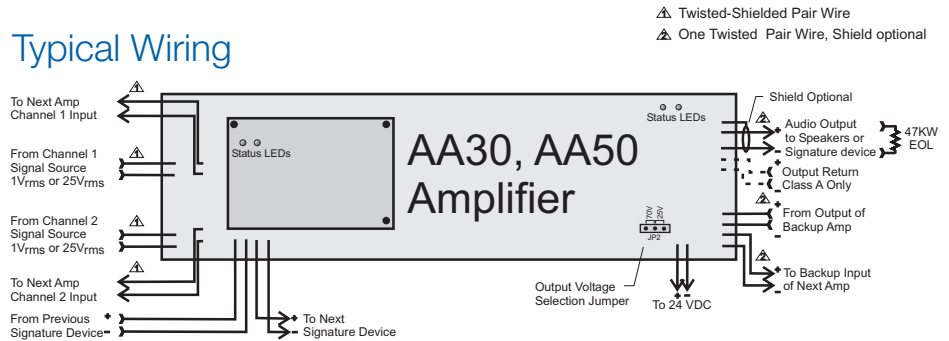
utcfireandsecurity.com

© 2010 UTC Fire & Security.  
All rights reserved.

## Engineering Specification

System remote amplifiers must communicate their status directly to the main control panel. External monitoring is not acceptable. Each amplifier must support dual channel audio. Amplifiers must support input signals at line a built in back up 1kHz tone generator that automatically activates with loss of input signal. Each amplifier must have provision for a back up amplifier. It must be possible to default to back up tone or standby amplifier in the event of the loss of input signals.

## Typical Wiring



## Specifications

Catalog Number	SIGA-AA30	SIGA-AA50
Active Power Required	1700 mA @ 24 Vdc	3200 mA @ 24 Vdc
Audio Power Output	30 Watts @ 25Vrms or 70Vrms	50 Watts @ 25Vrms or 70Vrms
Primary Inputs	Dual inputs, each 1Vrms	
Standby Power Required	1mA @ 24 Vdc	
Agency Listings	UL	
Frequency Response	800Hz to 2.8kHz (ULI) 400 Hz to 4 kHz (ULC), at -3db	
Harmonic Distortion	<5%	
Signature Data Circuit	2 module addresses	
Terminal Wire Gauge	18-12 AWG (0.75-2.5 mm <sup>2</sup> )	
Mounting	One space in RACCR, 2-WB3 or 2-WB7	
Relative Humidity	10-93% non condensing	
Temperature Rating	0°-49°C (32° - 120°F)	
Back up tone	1kHz	
Wiring Styles	Class A or Class B Output	

## Ordering Information

Catalog Number	Description	Ship Wt. lb. (kg)
SIGA-AA30	30 Watt Intelligent Audio Amplifier	2 (.9)
SIGA-AA50	50 Watt Intelligent Audio Amplifier	2 (.9)
SIGA-AA30-CS	30 Watt Intelligent Audio Amplifier (for connection to 25Vrms inputs)	2 (.9)
SIGA-AA50-CS	50 Watt Intelligent Audio Amplifier (for connection to 25Vrms inputs)	2 (.9)
<b>Wallboxes</b>		
2-WB3	EST2 Long Surface Wallbox (order 2-WB3D door separately) - Gray finish. For Semi-Flush mounting order Trim Kit. See note 1	38 (17.3)
2-WB7	EST2 Double Wide Surface Wallbox (order 2-WB7D door separately) - Gray finish. For Semi-Flush mounting order Trim Kit. See note 1	75 (34)
RACCR	Remote Audio Closet Cabinet (order RACCRR door separately). Red Finish	32 (14.5)
<b>Trim Kits</b>		
2-LFK	Long Semi-Flush Trim Kit for 2-WB3 wallbox. See note 1	4 (1.8)
2-DFK	Double Wide Semi-Flush Trim Kit for 2-WB7 box. See note 1	5 (2.3)
<i>Note 1: Standard finish is gray, red versions are available by adding suffix R to the catalog number e.g. 2-WB3R</i>		
<b>Related Equipment</b>		
SIGA-APS	6.4 Amp Power Supply	2 (.9)
SIGA-APS-220	6.4 Amp Power Supply 220 Vac	2 (.9)