

# DISTRIBUTION AMPLIFIERS

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DA103-110



DA103-107

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MANUAL PART NUMBER: 400-0449-005

## DA103-107 & DA103-110

### SIDEKICKER<sup>®</sup> WITH 2 VIDEO OUTPUTS USER'S GUIDE

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**ALTIMEX**

SIGNAL  
MANAGEMENT  
SOLUTIONS

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# DISTRIBUTION AMPLIFIERS

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## PRECAUTIONS / SAFETY WARNINGS 1

Please read this manual carefully before using your **DA103-107/110**. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your **DA103-107/110** and to prevent fire and shock hazards. Please read them carefully and heed all warnings.

### 1.1 GENERAL

- Qualified ALTINEX service personnel or their authorized representatives must perform all service.

### 1.2 INSTALLATION

- To prevent fire and shock, do not expose this unit to water or moisture. Do not place the **DA103-107/110** in direct sunlight, near heaters or heat-radiating appliances, or near any liquid. Exposure to direct sunlight, smoke, or steam can harm internal components.
- Handle the **DA103-107/110** carefully. Dropping or jarring can damage the unit.
- Do not pull any cables that are attached to the **DA103-107/110**.

### 1.3 CLEANING

- Clean only with a dry cloth. Never use strong detergents or solvents, such as alcohol or thinner. Do not use a wet cloth or water to clean the unit. Do not open the unit to clean.

### 1.4 FCC NOTICE

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions found herein, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
- Any changes or modifications to the unit not expressly approved by ALTINEX, Inc. could void the user's authority to operate the equipment.

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## ABOUT YOUR DA103-107/110 2

### DA103-107/110 SIDEKICKER WITH 2 VIDEO OUTPUTS

The **DA103-107/110** provides a means of transmitting computer or component video to two different displays from a single computer.

The **DA103-107/110** is compact and easy to use. It offers a female 15-pin HD input and 2 female 15-pin HD output connectors.

The Sidekicker is capable of being powered from one of three different sources. The first uses the +5V on pin 9 of the computer's 15-pin HD video connector (VESA standard). If the computer or video cable does not provide power to the **DA103-107/110**, then the second option obtains power from the computer's USB port if available. The video cable provided with the **DA103-107/110** has a USB connector on one end for use with this option. If there is no USB port available, the third option is to use the +9V adapter.

## TECHNICAL SPECIFICATIONS 3

Specifications are subject to change.  
See [www.altinex.com](http://www.altinex.com) for up-to-date information.

FEATURES/ DESCRIPTION	DA103-107/110
<b>Inputs</b>	
Video	15-pin HD female (1)
Power	2.5mm DC jack (1)
<b>Outputs</b>	
RGBHV/YPbPr	15-pin HD female (2)
<b>Compatibility</b>	
Video Signal Resolutions	VGA through UXGA, 480p through 1080i
Max. Cable Length (using ALTINEX cable CB37200MR)	VGA: 640x480@60Hz 250 ft (76 m) UXGA: 1600x1200@60Hz 200 ft (61 m)

Table 1. DA103-107/110 General

MECHANICAL	DA103-107/110
<b>DA103-107</b>	
Material/Color	Steel/Silver
Height	0.78 in (20 mm)
Width	4.23 in (107 mm)
Depth	1.74 in (44 mm)
Weight	0.38 lb (0.17 kg)
<b>DA103-110</b>	
Material/Color	ABS Plastic/Black
Height	0.92 in (23.4 mm)
Width	4.25 in (108 mm)
Depth	1.68 in (42.7 mm)
Weight	0.16 lb (0.07 kg)
<b>DA103-107/110</b>	
T° Operating (T° Max)	10°C-35°C (50°C)
Humidity	90% non-condensing
MTBF (calculations)	40,000 hrs

Table 2. DA103-107/110 Mechanical

ELECTRICAL	DA103-107/110
<b>Input Video Signal</b>	
Analog Signal Level	1.0 Vp-p max
Impedance	75Ω
<b>Input Sync Signal</b>	
H & V SYNC	TTL
Impedance	10 kΩ
<b>Output Video Signals</b>	
Analog Signal Level	0dB +/- 0.3dB
Impedance	75Ω
<b>Output Sync Signals</b>	
H&V Sync Levels	TTL
Impedance	75Ω
<b>Power</b>	
15-pin HD pin-9 (VESA DDC)/USB Port: 5 VDC	140 mA (0.70 W)
External Adapter: 9 VDC	150 mA (1.35 W)
<b>Accessories Included</b>	
Video Cable with USB	2 ft (0.61 m)
Power Adapter	9 VDC, 1 A 6 ft (2 m) min.

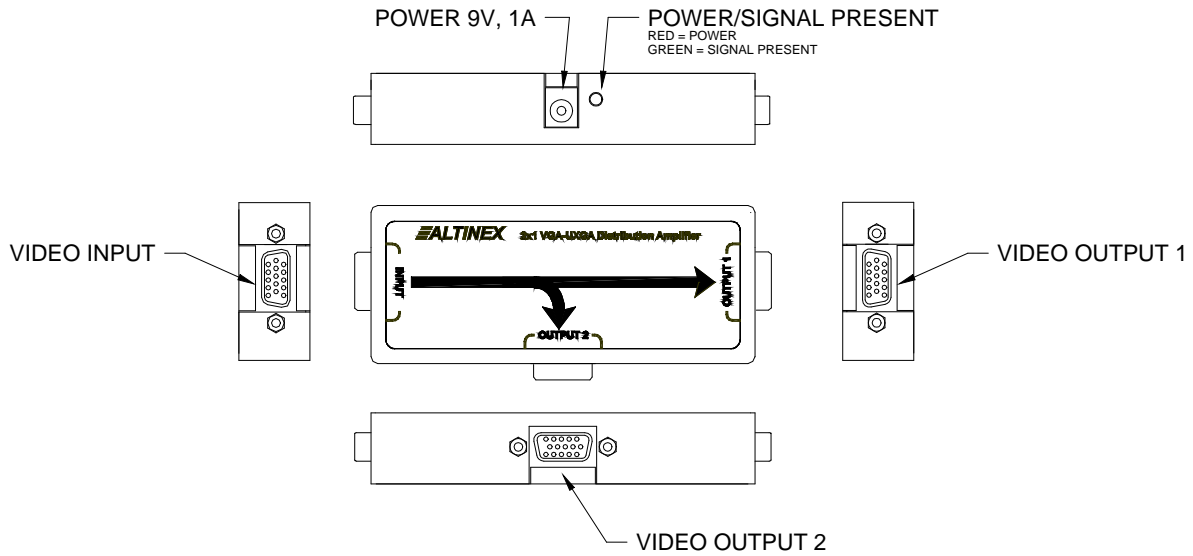
Table 3. DA103-107/110 Electrical

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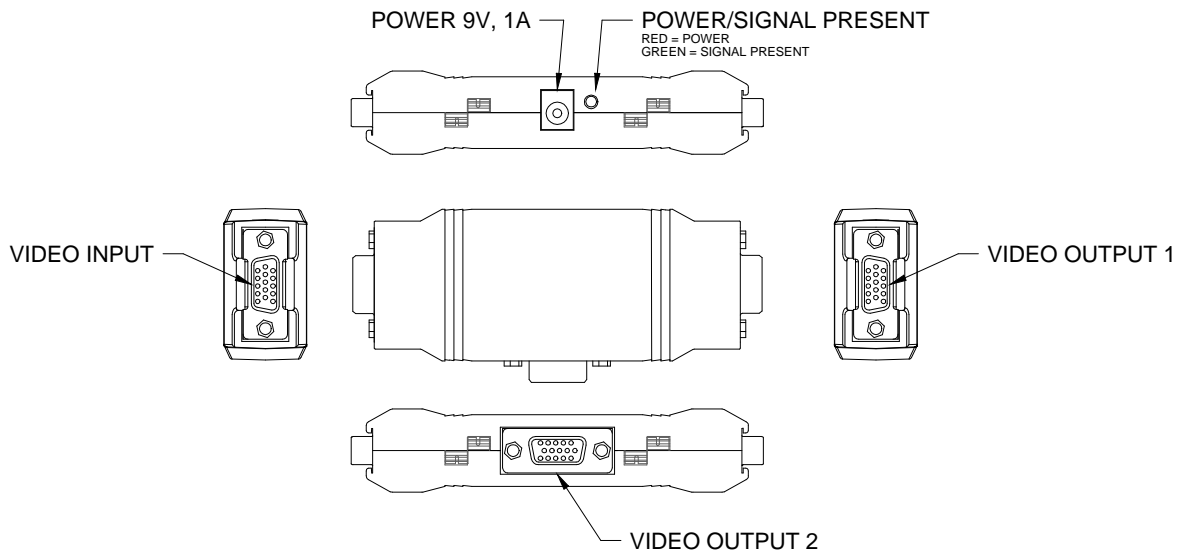
## PRODUCT DESCRIPTION

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### DA103-107



### DA103-110



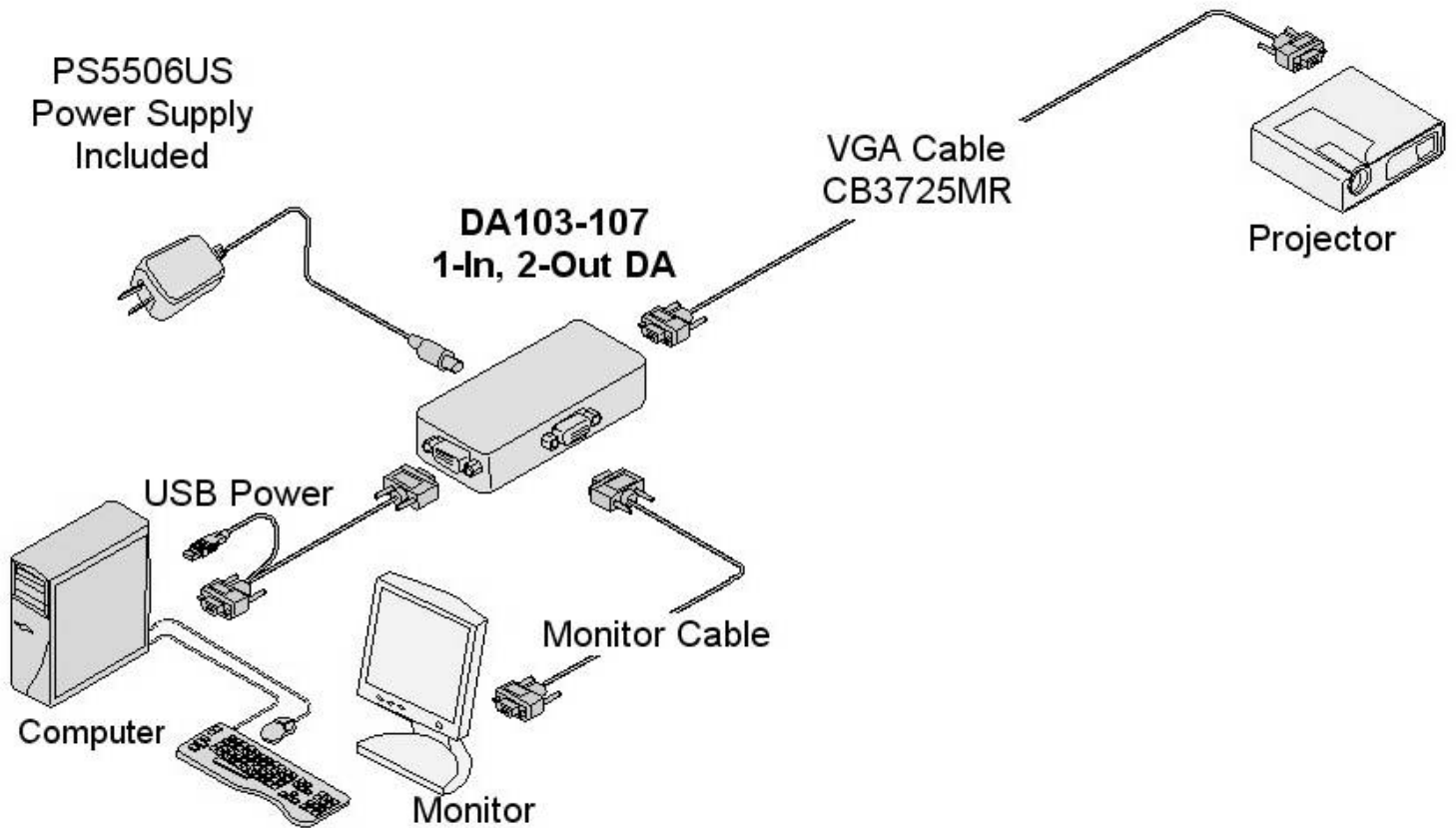
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## APPLICATION DIAGRAMS

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### DIAGRAM 1: TYPICAL SETUP

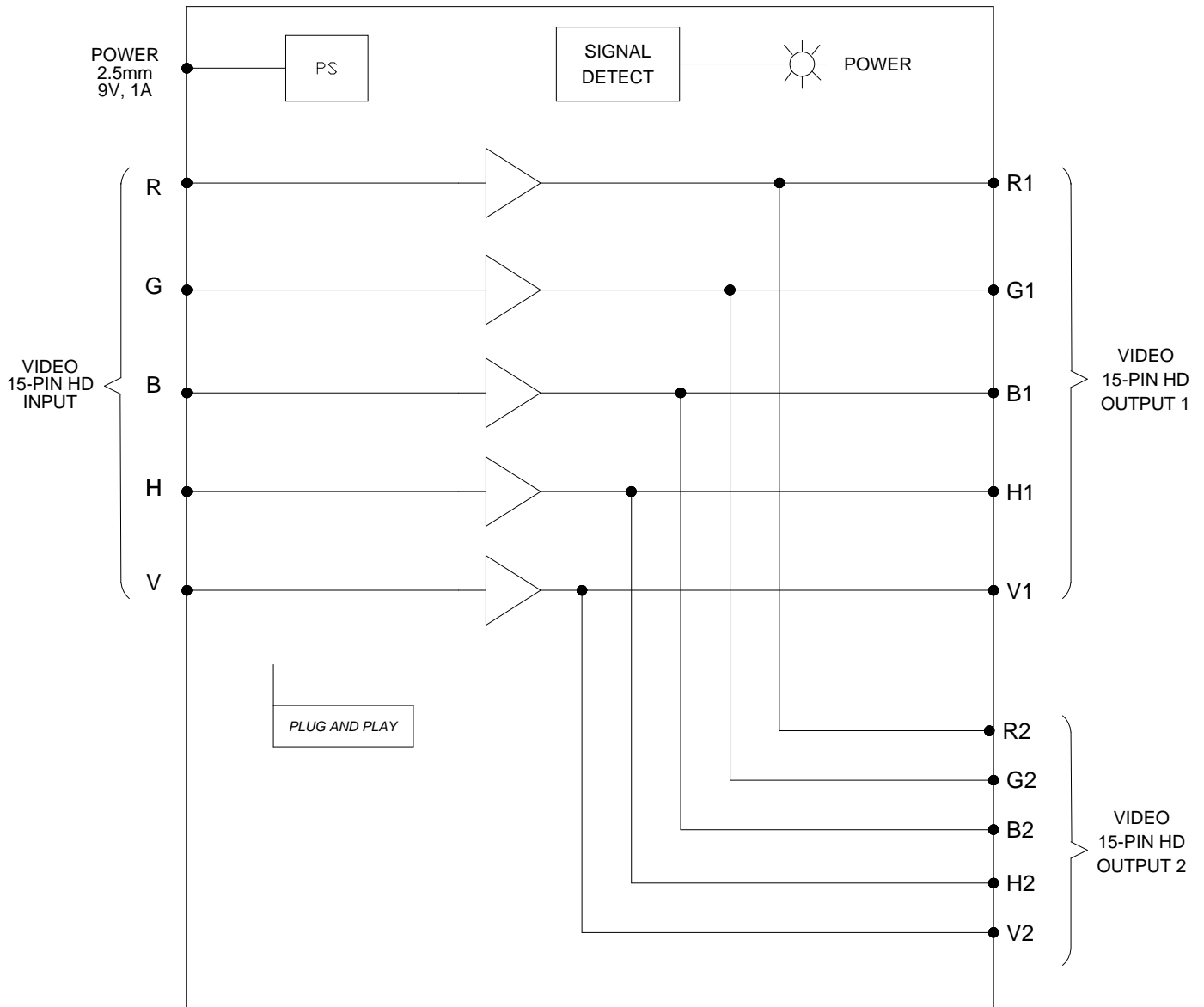
The DA103-107 is shown in the diagram below, but both the DA103-110 and DA103-107 have the save functionality.



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## DIAGRAM 2: INTERNAL VIEW

The block diagram for both the DA103-107 and the DA103-110 is shown below.



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## INSTALLING YOUR DA103-107/110 6

**Step 1.** Connect the input of the **DA103-107/110** to the video output of the computer using the cable provided. The Signal Present LED should be on. The LED will be red if there is power and green if a video signal is present.

**NOTE:** The **DA103-107/110** derives power from the video output connector of the computer. If the computer does not supply power at the video connector, it is necessary to connect the USB connector (from the video cable provided) to an unused USB port on the computer. If there is no USB port available, proceed to Step 2 and use the external adapter.

**Step 2.** Skip this step if the LED is on.

Connect the **DA103-107/110**'s power jack to an AC power adapter and plug the adapter into a working outlet.

**Step 3.** If the power is on, the LED on the **DA103-107/110** should be on and red; green if a signal is present.

**Step 4.** Connect VGA-type cables from the 15-pin HD output connectors on the **DA103-107/110** to the display devices.

**Step 5.** The **DA103-107/110** is now operational. Verify the picture quality on the receiving monitor is equivalent to the quality as displayed on the local monitor.

## OPERATION 7

The **DA103-107/110** requires no adjustments for proper performance. Once set-up, the **DA103-107/110** will work trouble-free without user intervention.

## TROUBLESHOOTING GUIDE 8

We have carefully tested and found no problems in the supplied **DA103-107/110**. However, we would like to offer suggestions for the following:

### 8.1 THE LED IS NOT RED.

**Cause 1: There is no power.**

*Solution:* Verify the **DA103-107/110** is connected to the proper power adapter or USB port.

*Solution 2:* Make sure the adapter is plugged into a working outlet and that power is on.

**Cause 2: The cables are loose.**

*Solution:* Verify the power plug from the AC adapter is plugged all the way into the **DA103-107/110**.

**Cause 3: The DA103-107/110 has a problem.**

*Solution:* If there is still no power, the **DA103-107/110** may require service. Please call ALTINEX at (714) 990-2300.



## 8.2 THERE ARE NO REMOTE IMAGES.

**Cause 1: The source has a problem.**

*Solution:* Connect the output of the computer directly to each monitor and verify the quality is good. If the images are good, see Cause 2.

**Cause 2: Cable connections are wrong.**

*Solution:* Verify the input of the **DA103-107/110** is connected to the output of the computer using the cable provided.

*Solution 2:* Verify that the Signal Present LED on the **DA103-107/110** is on and green. If the LED is on and green, check the connections from the receiver to the displays.

*Solution 3:* If the LED on the **DA103-107/110** is red, there may be a problem. Please call ALTINEX at (714) 990-2300.

## ALTINEX POLICIES

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### 9.1 LIMITED WARRANTY/RETURN POLICIES

Please see the ALTINEX website at [www.altinex.com](http://www.altinex.com) for details on warranty and return policies.

### 9.2 CONTACT INFORMATION

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