

## Welcome!

We greatly appreciate your purchase of the DA1907LX Ditto-Amp. We are sure you will find it reliable and simple to use. Superior performance for the right price, backed by solid technical and customer support is what Altinex has to offer.

We are committed to providing our customers with Signal Management Solutions® to the most demanding audiovisual installations at competitive pricing and we welcome you to join the ranks of our many satisfied customers throughout the world.

## 1. Precautions and Safety Warnings

Please read this manual carefully before using your DA1907LX. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your DA1907LX 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.

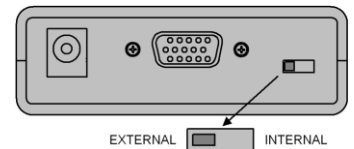
### 1.2 Installation Precautions

- To prevent fire or shock, do not expose this unit to water or moisture. Do not place the DA1907LX 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 DA1907LX carefully; dropping or jarring can damage the unit.
- Do not pull any cables that are attached to the DA1907LX.

## 2. Installation Procedures

**EDID** All display devices (TVs, monitors, projectors, etc.) have internal EDID memory that is used to store the video resolutions, refresh rates, and other data that works best for that display device. When you connect your computer/laptop to the input of the display, the computer reads this memory and then adjusts its output signal for the best image. The DA1907LX allows you to use the EDID memory from the device connected to Output 1 or the DA1907LX's own internal EDID. Using the internal EDID will allow the computer to choose from a wide range of standard resolutions and refresh rates; however, these settings may not be optimal for the display.

- Step 1. Determine if the source computer will use the internal EDID or the external EDID of the display device. For best results, Altinex recommends using the external EDID as that typically provides the best image.
- Step 2. Connect the +9V AC adapter input to AC voltage and the output plug to the DA1907LX. Verify the LED in the top right corner of the unit's front panel turns on and RED.
- Step 3. Connect the display devices (monitors and/or projectors) to Outputs 1 & 2 of the DA1907LX. Output 1 is the display from which the computer will read the EDID memory.
- Step 4. Connect the video output from the computer to the computer input connector on the DA1907LX using the cable provided. If a longer cable is required, make sure that the cable uses internal coaxial cables and that the cable is not excessively long.
- Step 5. Verify the LED on the face of the unit changes from RED to GREEN indicating an active signal is present. If the LED is not GREEN, the computer may not be sending video signals.  
**NOTE:** If using a laptop computer, you may need to be set the laptop to output external video manually using the function keys. If running Windows, use the Windows key plus the letter P (Win+P). The Windows key is located between the left side CTRL and ALT keys.
- Step 6. Verify the picture quality on both displays is good. If there is no signal, make sure that the display is compatible with the resolution of the computer graphics card.
- Step 7. The DA1907LX is now operational.



### 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 card.

### 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.

## 3. Limited Warranty/Return Policies

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

### 4. Technical Specifications

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

Features/Description	DA1907LX
General	
Inputs	
Input Connector	15-pin HD F (1)
Outputs	
Outputs 1 & 2	15-pin HD F (2)
Power	
DC Power	2.5 mm jack (1)
Compatibility	
Signal Types	RGB, RGsB, RGBS, RGBHV, YPbPr, MAC, SUN, SGI
Video Signal Resolutions	VGA through UXGA and 480p through 1080i
Accessories Included	
3 ft. (1 m) Video Cable	15-pin HD M-M
Power Adapter	+9VDC, 1.1 A

Table 1. DA1907LX General

Mechanical	DA1907LX
Material	0.1 in Al
Finish	Gray
Top Panel	Lexan
Height	3.0 in (76 mm)
Width	4.5 in (114 mm)
Depth	1.0 in (25 mm)
Weight	0.5 lb. (0.2 kg)
Shipping Weight (approx.)	1.0 lb. (0.5 kg)
T° Operating	10°C-35°C
T° Maximum	45°C
Humidity	90% non-condensing
MTBF (calculations)	40,000 hrs.

Table 2. DA1907LX Mechanical

Electrical	DA1907LX
Input Video Signal	
Analog Signal Level	1.5 Vp-p max
Impedance	75 ohms
Coupling	DC
Input Sync Signal	
Horizontal/Vertical or Composite	TTL (+/-)
Sync on Green	-0.3 V
Impedance	10 kohms
Output Video Signals	
Gain	0 dB +/- 0.5 dB
Impedance	75 ohms
Coupling	DC
Output Sync Signals	
Horizontal/Vertical or Composite	TTL (+/-)
Sync on Green	-0.3 V
Impedance	10 kohms
Power Consumption	
External Adapter: 9 VDC	280 mA (2.5 W max.)

Table 3. DA1907LX Electrical

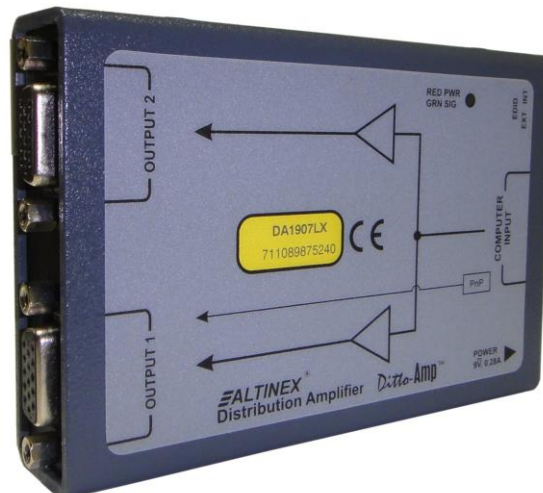
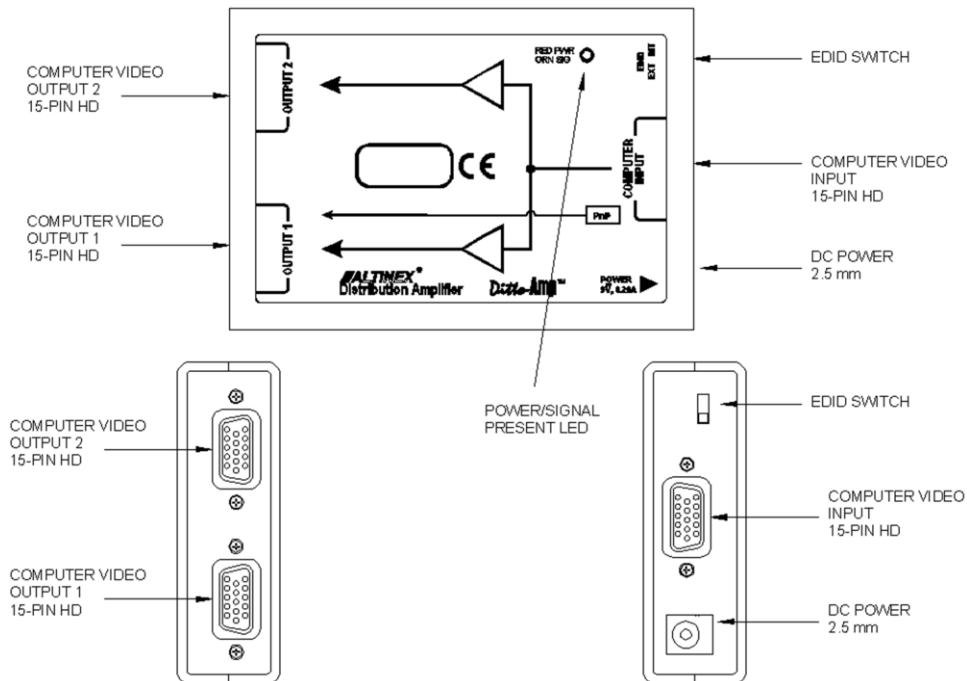
### 5. About Your DA1907LX

The DA1907LX (Ditto-Amp) is a high-resolution, 1-In 2-Out Distribution Amplifier designed to allow the connection of a single VGA-UXGA source to up to two scan-rate compatible displays. Very high-resolution video signals are able to pass without degradation in the image quality.

The DA1907LX offers a female 15-pin HD input featuring native Plug & Play compatibility on Output 1. An internal Plug & Play memory option may be selected for applications where using the Plug & Play feature of the remote device is not desired. Otherwise, the DA1907LX may be configured to read the EDID from the external source on Output 1 using the native resolution for the external display.

Compact and easy to use, the DA1907LX is perfect for audiovisual installations where a single computer needs to be connected to a projector (or presentation monitor) and a local monitor simultaneously. The DA1907LX has female 15-pin HD (VGA-type) connectors on all input and output connectors so it can be used with readily available standard VGA-type cables. If desired, the input and/or output of the DA1907LX can be easily adapted to 5 BNC connectors through Altinex adapter cables.

The DA1907LX is compatible with RGSB, RGBS, and RGBHV signal types, and using the proper cable type the DA1907LX can be used with MAC, SUN, or SGI platform computers.



### 6. Application Diagrams

Diagram 1: Typical Setup

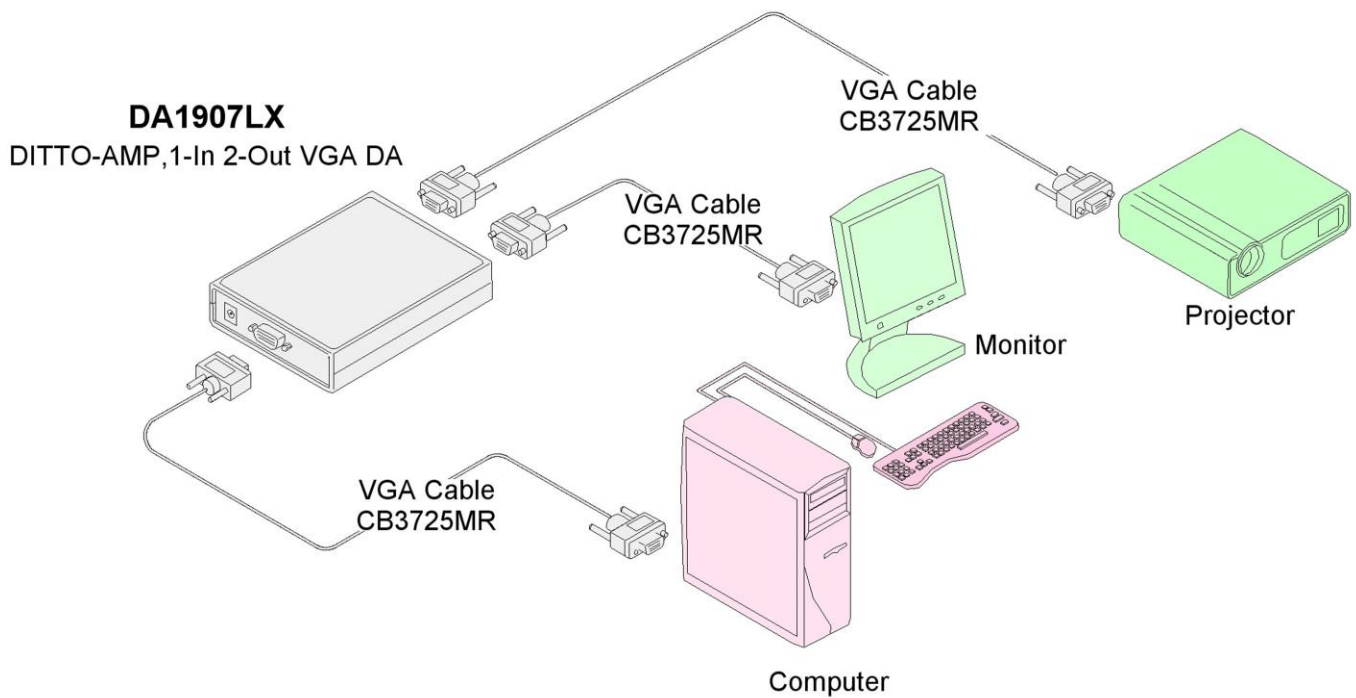
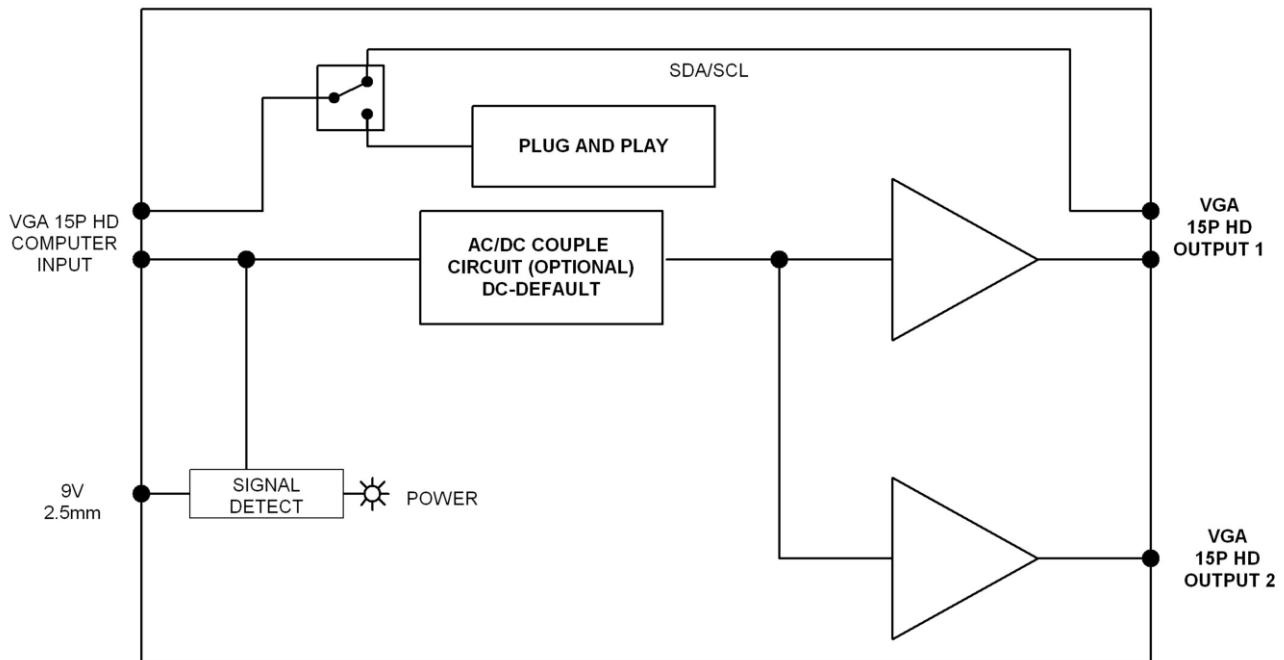


Diagram 2: Internal View



### 7. Operation

The DA1907LX requires no adjustments for optimal performance. Once set-up, the DA1907LX will work trouble-free without user intervention.

### 8. Troubleshooting Guide

We have carefully tested and have found no problems in the supplied DA1907LX. However, we would like to offer suggestions for the following:

DA1907LX	
Symptom	Resolution
LED is OFF	<ol style="list-style-type: none"> <li>1. Make sure the unit is plugged into a working AC outlet and the DC plug is inserted all the way into the switcher.</li> <li>2. Use only the power adapter provided.</li> </ol>
LED is NOT RED	<p>The LED should be ON and RED when power is applied. The LED should be ON and GREEN when the unit is receiving power and a SYNC signal.</p> <ol style="list-style-type: none"> <li>1. Make sure the supplied adapter is plugged into a working AC outlet and that the outlet has power.</li> <li>2. Verify the DC power plug coming from the AC adapter is plugged all the way into the DA1907LX.</li> <li>3. If adapter has power and the LED is still not on, the DA1907LX or the power adapter may require service.</li> </ol>
LED is NOT GREEN	<p>The LED should be ON and RED when power is applied. The LED should be ON and GREEN when the unit is receiving power and a SYNC signal.</p> <ol style="list-style-type: none"> <li>1. Disconnect the video input from the DA1907LX and verify the LED is ON and RED indicating power is present.</li> <li>2. Reconnect the computer's video output.</li> <li>3. Verify the computer output is operating correctly by connecting it directly to a local monitor.</li> <li>4. Disconnect the video output from the DA1907LX and then reconnect after 5 seconds. The computer screen should flash when it detects the external device and then output the video. At this time the LED should be green and the output signal should be present.</li> <li>5. Make sure the computer is set to output external video using the function keys or the Windows key plus the letter "P" (Win+P). If the video is present on the output but the LED is still not green, the DA1907LX is working but the LED may have a problem.</li> </ol>
No Display	<p>Set the computer for an output of 1024x768 at 60 Hz refresh rate. Most devices can display this resolution without any problems.</p> <ol style="list-style-type: none"> <li>1. Check the source and make sure there is a signal present.</li> <li>2. Make sure the display has power and is turned on.</li> <li>3. Make sure the correct input is selected on the display.</li> <li>4. Verify the refresh rate of the computer/laptop is compatible with the display. Some laptops provide a refresh rate of 75 Hz that some displays do not accept.</li> <li>5. Verify the output resolution of the computer/laptop is compatible with the display.</li> <li>6. Make sure the computer is set to output external video using the function keys or the Windows key plus the letter "P" (Win+P).</li> </ol>
Poor Output Image	<ol style="list-style-type: none"> <li>1. The source resolution may not be compatible with the projector or other display device. Try other resolutions from the source.</li> <li>2. The source and display may not be compatible. Connect the source directly to the input of the projector or other display device. If the image is poor the devices may be incompatible.</li> </ol>