



MANUAL PART NUMBER: 400-0016-004

DA1506RT

**2-IN, 6-OUT VGA
DISTRIBUTION AMPLIFIER
USER'S GUIDE**

DISTRIBUTION AMPLIFIERS

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DISTRIBUTION AMPLIFIERS

PRECAUTIONS / SAFETY WARNINGS 1

Please read this manual carefully before using your **DA1506RT** Distribution Amplifier. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your **DA1506RT** and to prevent fire and shock hazards. Please read them carefully and heed all warnings.

1.1 GENERAL

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

1.2. RACK-MOUNTING SAFETY GUIDELINES

- The maximum operating ambient temperature for this unit is 35°C.
- Distribute units evenly inside the rack. Hazardous conditions may be created by an uneven weight distribution.
- Connect the unit to a properly rated circuit.
- Reliable grounding should be maintained.

1.3 HANDLING

- For best results, place the **DA1506RT** on a flat, level surface in a dry area away from dust and moisture.
- To prevent fire or shock, do not expose this unit to water or moisture. Do not place the **DA1506RT** 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 **DA1506RT** carefully. Dropping or jarring can damage internal components.
- Do not place heavy objects on top of the **DA1506RT**. If the **DA1506RT** is to be mounted to a table or wall, use only ALTINEX-made mounting accessories.
- To turn off the main power, be sure to remove the power cord. The power outlet should be installed as near to the equipment as possible, and should be easily accessible.

- Do not pull any cables that are attached to the **DA1506RT**.
- If the **DA1506RT** is not used for an extended period, disconnect the power cord.

1.4 CLEANING

- Unplug the **DA1506RT** before 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 instruction manual, 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.

DISTRIBUTION AMPLIFIERS

ABOUT YOUR DA1506RT

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DA1506RT

2-In, 6-Out Distribution Amplifier (DA)

The **DA1506RT** is a 2-In, 6-Out VGA through UXGA distribution amplifier (DA). It is designed to connect 1 of 2 computer video sources to as many as 6 monitors, displays, and projectors.

The rear panel of the **DA1506RT** has 1 computer input and 6 outputs, while the front panel has a single input. If both the front and rear inputs have valid video signals, the image from the front panel will be displayed on the 6 outputs. The rear input can be permanently connected for normal operation and the front panel input can be saved for special applications. For example, a desktop PC is permanently connected to the rear panel along with the display devices. The image from a second source, like a laptop, may be connected to the front panel and temporarily override the desktop's image. The **DA1506DT** will automatically switch to the front panel's image.

Though primarily designed for use with displays using 15-pin HD (VGA-type) connectors, the **DA1506RT** can pass RGBHV, RGBS, and RGsB format signals using adapter cables. The **DA1506RT** is great for desktop use, but can also be rack-mounted using optional ALTINEX hardware.

TECHNICAL SPECIFICATIONS

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Specifications are subject to change. See www.altinex.com for up-to-date information.

FEATURES/DESCRIPTION	DA1506RT
GENERAL	
Input Connectors	15-pin HD female (2)
Output Connectors	15-pin HD female (6)
Compatibility	VGA through UXGA, RGBHV, RGBS, RGsB, and RsGsBs

Table 1. **DA1506RT** General

MECHANICAL	DA1506RT
Material	0.1" Al
Finish	Gray
Height (inches)	1.75 in (44mm)
Width (inches)	8.50 in (216mm)
Depth (inches)	4.50 in (114mm)
Weight (pounds)	2.0 lb (0.91 kg)
T° Operating	10°C-35°C
T° Maximum	50°C
Humidity	90% non-condensing
MTBF (calculations)	40,000 hrs

Table 2. **DA1506RT** Mechanical

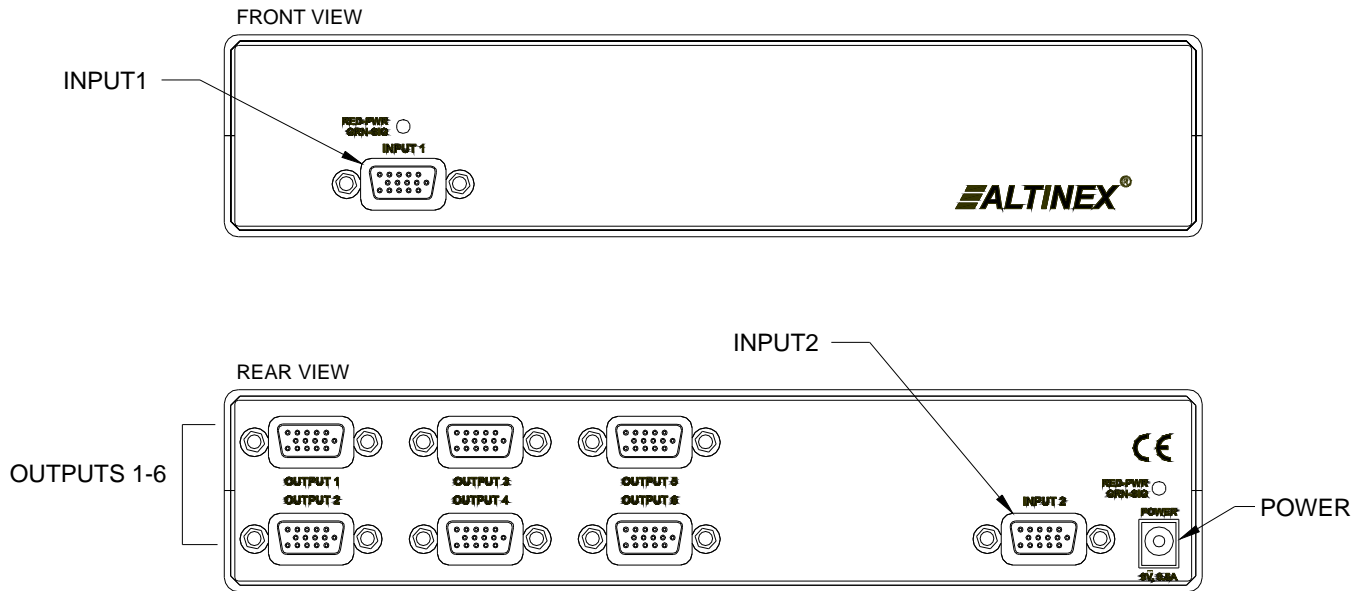
ELECTRICAL	DA1506RT
Input Video Signal	
Analog Signal	1.5 Vp-p max
Impedance	75 ohms
Input Sync Signal	
Horiz/Vert/Composite Sync	TTL(+/-)
Sync on Green	-0.3V
Impedance	10 kohms
Output Video Signals	
Analog Signal	0 dB +/-0.5 dB
Impedance	75 ohm
Output Sync Signal	
Horiz/Vert/Composite Sync	TTL(+/-)
Sync on Green	-0.3 V
Impedance	75 ohms
Coupling	DC
Power	
External adapter (included)	9 VDC 500 mA
Total Power	2.5W max.

Table 3. **DA1506RT** Electrical

DISTRIBUTION AMPLIFIERS

PRODUCT DESCRIPTION

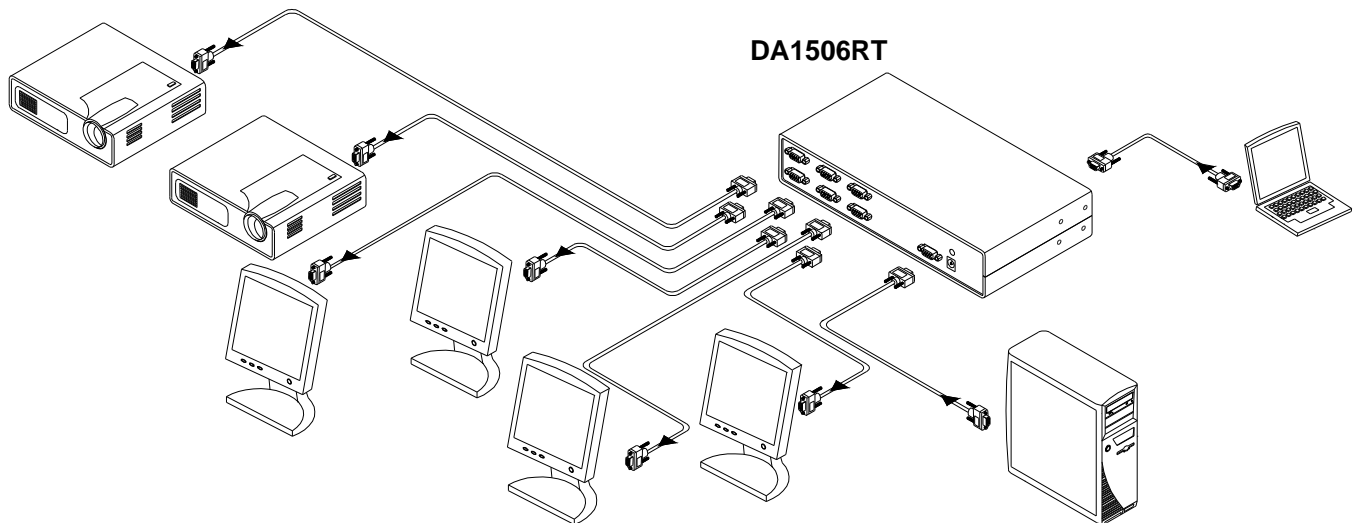
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APPLICATION DIAGRAMS

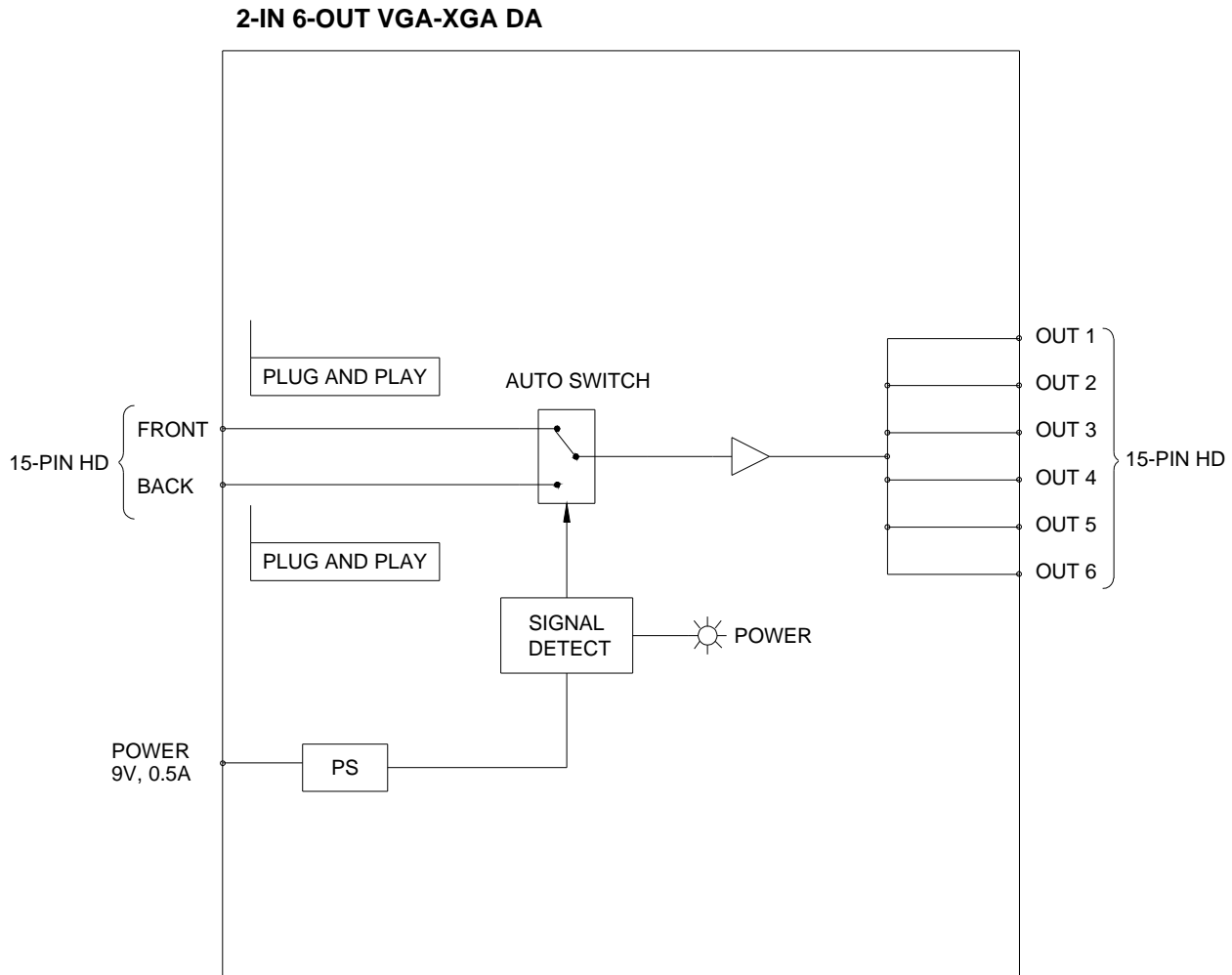
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DIAGRAM 1: TYPICAL SETUP



DISTRIBUTION AMPLIFIERS

DIAGRAM 2: INTERNAL VIEW



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DIAGRAM 3: CONNECTOR PINOUTS

INPUT CONNECTORS

Pin No.	PIN ASSIGNMENTS
1	Red
2	Green
3	Blue
4	Ground
5	Ground
6	Ground
7	Ground
8	Ground
9	VESA +5V IN
10	Ground
11	Ground
12	VESA SDA
13	Horizontal Sync
14	Vertical Sync
15	VESA SCL

Table 4. The DA1506RT Input Pins

OUTPUT CONNECTORS

Pin No.	PIN ASSIGNMENTS
1	Red
2	Green
3	Blue
4	No Connection
5	Ground
6	Ground
7	Ground
8	Ground
9	+5V
10	Ground
11	No Connection
12	No Connection
13	Horizontal Sync
14	Vertical Sync
15	No Connection

Table 5. The DA1506RT Output Pins

DISTRIBUTION AMPLIFIERS

INSTALLING YOUR DA1506RT 6

- Step 1.** Plug the power adapter into an AC receptacle.
- Step 2.** Connect the power to the unit. The power indicator LEDs on the front and back panels will turn on and red. This indicates that the unit is operational.
- Step 3.** Connect a VGA-type cable from a computer to Input 2 on the amplifier's rear panel. The LEDs will remain red, but the images will be present on the output connectors.
- Step 4.** Connect a VGA-type cable from another PC or laptop to Input 1 on the amplifier's front panel. If there is a signal present on Input 1, then the LEDs will turn green indicating that Input 1's image is the image present on the output connectors.
- Step 5.** Connect the output connectors of the amplifier to your display devices: monitors, projectors, LCDs, etc.
- Step 6.** If the image is less than perfect, check all of the connections. Poor quality cables may often degrade the performance of the product. Make sure that the cables used are coaxial cables and that all pins are in good condition.

OPERATION 7

There are no adjustments necessary to operate the unit. The **DA1506RT** will operate successfully as long as cables are attached properly and other technical specifications are followed.

TROUBLESHOOTING GUIDE 8

We have carefully tested and found no problems in the supplied **DA1506RT**; however, we would like to offer suggestions for the following:

- Please make sure that the input amplitude of analog signal is less than 1.5 Vp-p.
- Please use the ALTINEX-supplied external adapter (9V, 500mA).
- Please make sure that proper quality of cables is used. We recommend ALTINEX-made cables for best results.
- If a problem arises after continuous usage at higher voltage, higher temperature, higher humidity, or at other extreme environmental conditions, please make the necessary adjustments for the DA1506RT to function safely and properly.

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9.1 LIMITED WARRANTY/RETURN POLICIES

Please see the ALTINEX website at www.altinex.com for details on warranty and return policies.

9.2 CONTACT INFORMATION

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