

## REGULATORY COMPLIANCE

FSR'S ELECTRONIC PRODUCTS have been tested for compliance with: FCC Class A and CE The Power Adapter has been tested for compliance with: UL, CSA and CE.

## WARRANTY POLICY

This product is warranted against failures due to defective parts or faulty workmanship for a period of one year after delivery to the original owner. During this period, FSR will make any necessary repairs or replace the unit without charge for parts or labor. Shipping charges to the factory or repair station must be prepaid by the owner, return-shipping charges, via UPS / FedEx ground, will be paid by FSR.

This warranty applies only to the original owner and is not transferable. In addition, it does not apply to repairs done by other than the FSR factory or Authorized Repair Stations.

This warranty shall be cancelable by FSR at its sole discretion if the unit has been subjected to physical abuse or has been modified in any way without written authorization from FSR. FSR's liability under this warranty is limited to repair or replacement of the defective unit.

FSR will not be responsible for incidental or consequential damages resulting from the use or misuse of its products. Some states do not allow the exclusion of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Warranty claims should be accompanied by a copy of the original purchase invoice showing the purchase date (if a Warranty Registration Card was mailed in at the time of purchase, this is not necessary). Before returning any equipment for repair, please read the important information on service below.

## SERVICE

Before returning any equipment for repair, please be sure that it is adequately packed and cushioned against damage in shipment, and that it is insured. We suggest that you save the original packaging and use it to ship the product for servicing. Also, please enclose a note giving your name, address, phone number and a description of the problem.

**NOTE: all equipment being returned for repair must have a Return Authorization (RMA) Number. To get a RMA Number, please call the FSR Service Department (973-785-4347).**

**Please display your RMA Number prominently on the front of all packages.**

### Contact Information:

244 Bergen Boulevard,  
West Paterson, NJ 07424

Tel: (973) 785-4347 · Fax: (973) 785-4207

E-Mail: [sales@fsrinc.com](mailto:sales@fsrinc.com) · Web: <http://www.fsrinc.com>

issue date: 8-03

# FSR

## CDA - 2EQA

### 1 x 2 DISTRIBUTION AMPLIFIER with EQUALIZATION

## OPERATIONS MANUAL



FRONT



REAR

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## PROPRIETARY INFORMATION

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Thanks for purchasing the FSR CDA - 2EQA, a 1 x 2 distribution amplifier with equalization. In addition to scaling switchers, such as the MAS-4100, FSR offers a full line of interfaces, line drivers, distribution amplifiers, down converters, power sequencers and more.

### Operators Safety Summary

*The general safety information in this summary is for operating personnel.*

**Do Not Remove Covers or Panels** There are no user-serviceable parts within the unit. Removal of the top cover will expose dangerous voltages. To avoid personal injury, do not remove the top cover. Do not operate the unit without the cover installed.

**Power Source** This product is intended to operate from a, provided, wall transformer power source.

**Use the Proper Power Cord** Use only the power cord and connector specified for your product. Use only a power cord that is in good condition. Refer cord and connector changes to qualified service personnel.

**Do Not Operate in Explosive Atmospheres** To avoid explosion, do not operate this product in an explosive atmosphere.

### AUDIO

Bandwidth: 20 Hz to 20 kHz (+/-0.05 dB)  
THD + Noise: 0.01% @ 20 kHz at rated Max Output S/N  
>98 dB  
Noise Floor: < 98 dB  
Stereo separation: -90 dB @ 1 kHz

### AUDIO INPUT

Number/type: 2 stereo unbalanced  
Connectors: Two 3.5mm stereo mini connectors  
Impedance: 10K Ohms unbalanced  
Max level: +6 dBm

### AUDIO OUTPUT

Number/type: 1 Balanced Stereo (may be used in unbalanced configuration)  
Connector: 5 Position mini Phoenix  
Impedance: 50 ohms  
Gain: + 6 dB balanced or unbalanced  
Maximum Level: 600 ohms: +12 dBm Balanced / +6 dBm Unbalanced Hi - Z: +14 dBm Balanced / +8 dBm Unbalanced

### SYNC

Input level: 2.0 Vp-p to 5.0 Vp-p  
Output level: 4.0 Vp-p into Hi-Z, 2.0 Vp-p into 75 ohm  
Input Impedance: 511 ohms  
Output impedance: 75 ohms  
Polarity: Positive or negative  
Horizontal frequency: 15 kHz - 200 kHz  
Vertical frequency: 30 Hz - 150 Hz

### POWER

Wall Transformer (provided)  
with locking connector 9Vac @ 500 ma

## TECHNICAL SPECIFICATIONS

### VIDEO INPUT

Number/type:	VGA / SVGA / XGA / SXGA / UXGA / RGBHV / RGBS / RGsB / RsGsBs
Connectors:	15 pin HD female
Level (nominal):	Analog 0.7 Vp-p
Level (maximum):	2 Vp-p
Impedance:	75 ohms

### EQUALIZED VIDEO OUTPUT

Number/type:	1 VGA / SVGA / XGA / SXGA / UXGA / RGBHV / RGBS / RGsB / RsGsBs
Connectors:	One 15 pin HD female
Bandwidth:	Supports up to QXGA (2048X1536)
Without cable	500MHz
50' cable	308 MHz (-3dB) 0-215 MHz +/-0.25dB
100' cable	225 MHz (-3dB) 0-180 MHz +/-0.25dB
150' cable	173 MHz (-3dB) 0-150 MHz +/-0.25dB

This performance data is based on the CDA-2EQA plus the specified length of WP8255 (West Penn) cable with a full amplitude (0.7v P-P) signal applied.

Level (nominal):	Unity / User adjustable via HI / MED / LOW Jumper
Gain:	HI = 125' to 175', MED = 60' to 125', LOW = 0' to 60'
Impedance:	75 ohms
Design Cable:	West Penn WP8255 or equal

### LOCAL VIDEO OUTPUT

Number/type:	1 VGA / SVGA / XGA / SXGA / UXGA / RGBHV / RGBS / RGsB / RsGsBs
Connectors:	One 15 pin HD female
Bandwidth:	300MHz @ -3dB
Gain:	Unity (buffered)
Impedance:	75 ohms

## INTRODUCTION

The CDA-2EQA, is an ultra high bandwidth 1x2 Distribution Amplifier with Equalization for applications requiring the highest possible video quality. Computer video signals quickly lose color and clarity after about 25 feet. Unbalanced audio is prone to hum and buzz. This unit will permit cable runs of 175 feet.

You spend a significant amount of time generating the best possible image as well as the highest quality audio, don't trust those signals to retain that fidelity in a long cable run. The CDA-2EQA will compensate for the cable's shortcomings and deliver both the video and audio to it's destination with the same fidelity that it was created with. High bandwidth and flat frequency response - just what you need.

To insure the best possible signal reproduction, the CDA-2EQA has been designed to provide up to 525 MHz of bandwidth, ensuring compatibility with today's and tomorrow's most demanding video signal requirements. The audio is also handled properly resulting in a balanced audio drive.

The CDA-2EQA solves problems and more in one easy to install package. It combines an ultra high bandwidth video line driver and an active audio balancer into one easy to install package. The unit also features user selectable cable equalization, a fully buffered local monitor output, and greater than 525 MHz of bandwidth.

## APPLICATIONS

- Boardrooms
- Classrooms
- Conference Centers
- Houses of Worship
- Staging and Rental
- Control Rooms

## INSTALLATION

**Do not plug in the power supply until all wiring is completed.**

Connect the video and audio connectors per the diagram.

Connect the audio output cables to the captive screw terminals labeled "Audio Out". The appropriate wiring configuration for balanced and unbalanced connections is shown on the next page.

Set the cable equalization jumpers for optimum performance at the desired cable length (LOW = 0 - 60', MED = 60 - 125', HI = 125 - 175'). These settings are based on WP 8255 (West Penn) cables or equivalent.

Connect the 9 VAC power supply output to the locking Power In connector

Confirm proper video and audio operation before mounting the CDA - 2EQA

Use the supplied brackets to mount the CDA - 2EQA to the underside or topside of the table.

Perform the final operational check.

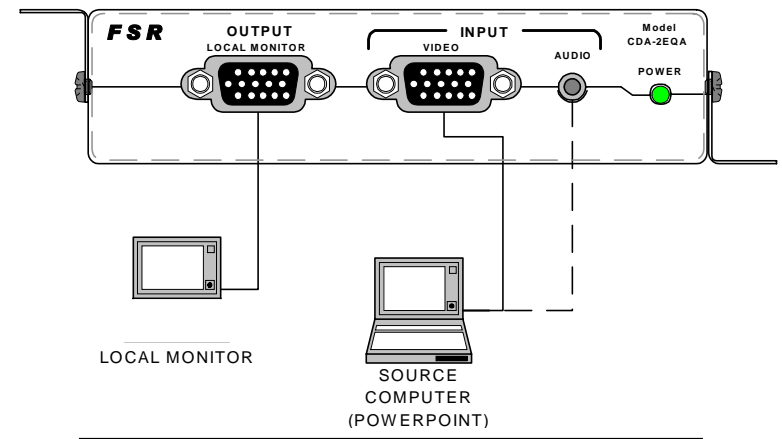
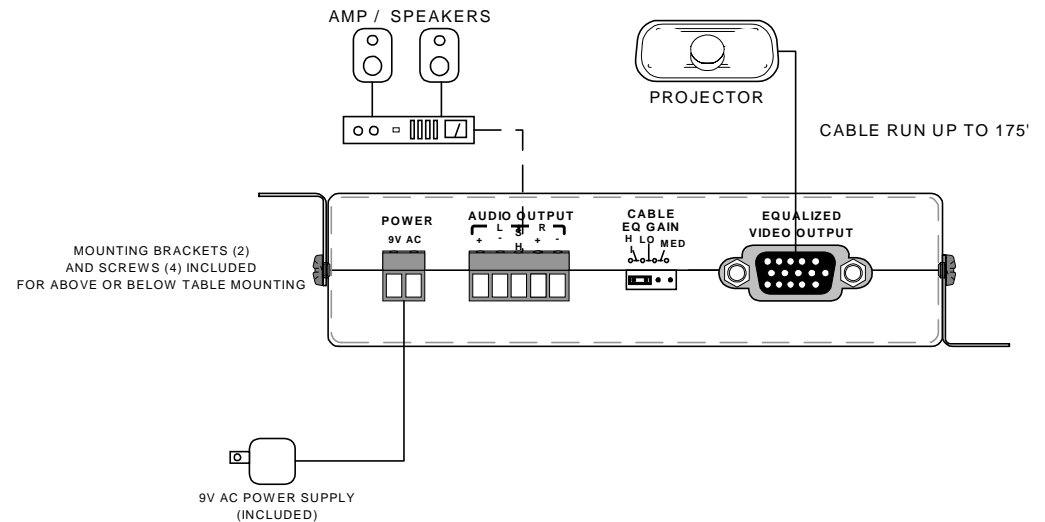


*FRONT VIEW*

*REAR VIEW*



## TYPICAL APPLICATION



### AUDIO

#### Output Connector Wiring

