

# VGA De-Skew Controller





Model #: C-VGA-DSKW



#### © 2010 Avenview Inc. All rights reserved.

The contents of this document are provided in connection with Avenview Inc. ("Avenview") products. Avenview makes no representations or warranties with respect to the accuracy or completeness of the contents of this publication and reserves the right to make changes to specifications and product descriptions at any time without notice. No license, whether express, implied, or otherwise, to any intellectual property rights is granted by this publication. Except as set forth in Avenview Standard Terms and Conditions of Sale, Avenview assumes no liability whatsoever, and disclaims any express or implied warranty, relating to its products including, but not limited to, the implied warranty of merchantability, fitness for a particular purpose, or infringement of any intellectual property right.

Reproduction of this manual, or parts thereof, in any form, without the express written permission of Avenview Inc. is strictly prohibited.

## **Table of Contents**

Section 2	L: Getting Started	3
1.1	Important Safeguards	3
1.2	Safety Instructions	3
1.3	Regulatory Notices Federal Communications Commission (FCC)	4
1.4	Introduction	4
1.5	Package Contents	5
1.6	Before Installation	5
1.7	Panel Description	. 6
1.7.	1 Front Panel	. 6
1.7.	2 Rear Panel	. 6
1.7.	3 Push Button	. 6
1.8	Installation	7
Section 2	2: Specifications	7



## **Section 1: Getting Started**

### 1.1 Important Safeguards

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

#### What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
  - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - Repair or attempted repair by anyone not authorized by us.
  - Any damage of the product due to shipment.
  - Removal or installation of the product.
  - Causes external to the product, such as electric power fluctuation or failure.
  - Use of supplies or parts not meeting our specifications.
  - Normal wear and tear.
  - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

### 1.2 Safety Instructions

The Avenview C-VGA-DSKW De-skew controller has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment's, the C-VGA-DSKW should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Do not dismantle the housing or modify the module.
- Dismantling the housing or modifying the module may result in electrical shock or burn.
- Refer all servicing to qualified service personnel.
- Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Have the module checked by a qualified service engineer before using it again.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.



## 1.3 Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

#### 1.4 Introduction

The Avenview C-VGA-DSKW VGA De-skew Controller offers the flexible functionality to allow skew compensation among VGA R, G, B signals or Component video Y, Pb, Pr due to long transmission or thru low quality cable. This unit is perfect for compensating for the skew introduced by a typical CAT-5/5e LAN cable with differing electrical lengths on each pair. By adjusting the delay between each color individually, the graphics or video quality can be assured.



- Control the delay of VGA colors individually
- Applicable for Component video (YPbPr)
- Stores the recent state of the adjustment
- Push buttons for delay compensation
- Work with the long distance transmitted VGA signal
- Portable size



## 1.5 Package Contents

Before you start the installation of the converter, please check the package contents.

C-VGA-DSKW x 1
 Power Adapter (+5VDC, 2A) x 1
 User's Manual x 1

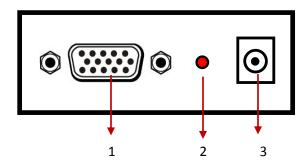
### 1.6 Before Installation

- Put the product in an even and stable location. If the product falls down or drops, it may cause an injury or malfunction.
- Don't place the product in too high temperature (over 50°C), too low temperature (under 0°C) or high humidity.
- Use the DC power adapter with correct specifications. If inappropriate power supply is used then it may cause a fire.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.



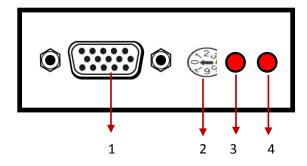
## 1.7 Panel Description

#### 1.7.1 Front Panel



1. VGA Input	2. Power Indicator
3. <b>5V DC Power Jack</b>	

#### 1.7.2 Rear Panel



1. VGA Output	2. Rotary Switch (de-skew control: 0~2 for R, 3~5 for G, 6~7 for B)
3. Increase Delay	4. Decrease Delay

### 1.7.3 Push Button



There are totally 31 steps or 62 ns for tuning delays for each color. Pushing left or right button will automatically decrease or increase the phase delay for the selected channel.





### 1.8 Installation

To setup Avenview C-VGA-DSKW follow these steps for connecting to a device:

- 1. Connect VGA / Component source to VGA-IN Port
- 2. Connect VGA / Component enabled monitors to VGA OUT Port
- 3. Power up the C-VGA-DSKW
- 4. Compensate the delays between colors
- 5. Power on HDMI Sources.

# **Section 2: Specifications**

Item	Description
Units	C-VGA-DSKW
<b>Unit Description</b>	VGA / Component De-Skew Controller
Video Bandwidth	Single Link 122 MHz
<b>Supported Resolutions</b>	Up to WUXGA 1920x1200
Delay Controls	62ns for each color with 2ns delay step increments
Input	1 x VGA
Output	1 x VGA
Dimensions (L x W x H)	2.8" x 3.3" x 1.0"
Power Supply	5V 2A DC
Power Consumption	1 Watt (max)

#### **Environmental**

<b>Operating Temperature</b>	32° ~ 104°F (0° to 40°C)
<b>Storage Temperature</b>	-4° ~ 140°F (-20° ~ 60°C)
Relative Humidity	20~90% RH (no condensation)





#### Disclaimer

While every precaution has been taken in the preparation of this document, Avenview Inc. assumes no liability with respect to the operation or use of Avenview hardware, software or other products and documentation described herein, for any act or omission of Avenview concerning such products or this documentation, for any interruption of service, loss or interruption of business, loss of anticipatory profits, or for punitive, incidental or consequential damages in connection with the furnishing, performance, or use of the Avenview hardware, software, or other products and documentation provided herein.

Avenview Inc. reserves the right to make changes without further notice to a product or system described herein to improve reliability, function or design. With respect to Avenview products which this document relates, Avenview disclaims all express or implied warranties regarding such products, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement.

