Contents

HDMI Series: Converter

Desciption: VGA to HDMI

Model No.: HDCO-01E

I. INTRODUCTION

This kind of the Converter is a VGA video converter. It converts VGA input into HDMI to allow PC users to show their image not only on the PC's monitor, but could also on TV, to have a large display. The conversion is along with the R/L audio. HDCO-01E offers solutions for digital entertainment center, HDTV retail and show site, HDTV, STB, DVD and Projector factory, noise space and security concerns, data center control, information distribution, conference room presentation, school and corporate training environments.

LIABILITY STATEMENT

Every effort has been made to ensure that this product is free of defects. Oarsman Electronics Co., Ltd cannot be held liable for the use of this hardware, any direct or indirect consequential damages arising rom its use. It is the responsibility of the user of the hardware to check that it is suitable for his/her requirements and that it is installed correctly.

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FEATURES

The series of the HDMI Converter, Amplifier, Switcher have many features that enable them to perform in a superior manner.Among those features you will find:

l   Easy to Use: Install in seconds, no need of setting.
l   Conversion: It could convert PC's VGA video and R/L audio into completeHDMI.
l   Extra VGA and R/L audio outputs: the outputs could be connected back to PC's monitor and speakers.
l   Manual adjusting button: used for position the image precisely under some extreme condition.
l   HDCP compliant.

II. SPECIFICATIONS

Signal Inputs/Output	
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Maximum Single Link Range	1600X1200, 1080P
Output Video	HDMI + HDCP: 1.0/1.1/1.2/1.3
VGA	640x480 60Hz 72Hz 75Hz 800x600 60Hz 72Hz 75Hz 1024x768 60Hz 70Hz 75Hz 1280x1024 60Hz 1600x1200 60Hz
DTV/HDTV	480i/576i/480p/576p/720p/1080i/1080P
Digital Signal I/O	
HDMI Compliance	HDMI 1.3
Operating Frequency	
Frequency	Up to165Mhz
Video Amplifier Bandwidth	2.5Gpbs/250MHz
Resolutions(HDTV)	
Interlaced(50&60Hz)	480i,576i,1080i
Progressive(50&60Hz)	480p,576p,720p,1080p
Mechanical	
Size(W-H-D)	89mmW x 29mmH x 68mmD
Weight(Net)	0.68kgs
Warranty	
Limited Warranty	1 Year Parts and Labor
Environmental	
Operating Temperature	0 ℃ to +70℃
Operating Humidity	10% to 85 % RH (no condensation)
Storage Temperature	-10℃ to +80℃
Storage Humidity	5% to 90 % RH (no condensation)
Power Requirement	
External Power Supply	5V DC@1A
Regulatory Approvals	
Converter Unit	FCC,CE,
Power Supply	CE,FCC
Accessories Adapter	
AC Power Adapter	US standard, UK standard and so on.

* Oarsman Reserves The Right to Revise Specification.

III. PACKAGE CONTENTS

Please pay attention to check all items are packed with the product you purchased as below:

l   Main Unit: HDCO-01E
l   5V DC Power Supply
l   User's Manual

IV. PANEL DESCRIPTIONS

Please study the panel drawings below and become familiar with the signal input(s), output(s) and power requirements.

OUTPUT

V. CONNECT AND OPERATE

Before installation, please make sure all devices you wish to connect have been turned off.

  a: Connect the VGA video and R/L audio from computer to HDCO-01E.
    (Input cables are optional)
  b: Connect the HDMI output from HDCO-01E to the TV which has HDMI input.
  c: Connect the VGA and R/L audio output of HDCO-01E back to the computer's
    monitor and speaker if necessary.
  d: Insert the DC side of 5v power supply into HDCO-01E and then connect the AC
    side of the power supply into the wall outlet.
  e: Power on the computer and TV, choose the input of TV to it's HDMI channel.
  f: The image does not need to be adjusted, the HDCO-01E will position it
    automatically, the user may adjust the horizontal position under some
    extreme condition.

Reminder: Insert / Extract Cable Gently.

VI. MAIN FEATURES

Analog Video Input Front End Interface

Triple ADC with 12 - 140 MHz Sampling Rate
Integrated line locked PLL generates pixel clock from HSYNC
Integrated 5-bit pixel clock phase adjustment for precise sample timing control
Integrated clamp with timing generator
Integrated Brightness & Contrast controls
Integrated precision voltage reference
Compatible with VGA through SXGA RGB graphics signals
Mid-Scale Clamping
Fully Sync Processing
Black and mid-level precision clamp and calibration.
Input video mode status detection
Digital Video Input Front End Interface
IRGB 444 ………….. 8/10/12 bits/channel ....….… 1/3 channel
Multi-format digital input up to 200M Pixel/sec
Video data input pins re-order function
Input video mode status detection
Inverse Gamma Correcting (De-Gamma)
Programmable Data Enable (DE) generator
Programmable Vertical Sync (VS) generator
Programmable Horizontal Sync (HS) generator
Digital Data Link Engine
HDMI 1.3/1.2/1.1/1.0
HDCP 1.3/1.2/1.1/1.0
DVI 1.0
Supports video optional formats : EIA/CEA-861-B
Analog TMDS Interface
TMDS data link up to 2.0G-bit/s each channel
Including 3 data channel and 1 clock channel
Hot Plug detection
TMDS Clock Channel Plug detection

VII. WARNING

To Reduce the risk of FIRE,ELECTRIC SHOCK OR PRODUCT DAMAGE:

Reminder: Clean this unit with a soft, dry cloth.
Never use alcohol, paint thinner or benzine to clean this unit.

a: Do Not Expose This Apparatus to Water, Moisture, and Dripping; Plus, Avoid to
Splashing, Placing objects which Filled with Liquieds, Such as Vases

b: Do Not Install or Place This Unit in a Bookcase, Built-in Cabinet or in Another
Confined Space. Ensure TheUnit Is Well Ventilated.

c: Preventing Risk of ElectricShock or Fire Hazard, Due to Overheating . Do Not
Obstruct The Unit's Ventilation, Such as Newspapers, Tablecloths, Curtains, or
Similar Items.

d: Do Not Install Near any Heat Sources Such as Radiators, Heat Registers, Stoves, or Other Apparatus (Including Amplifiers) That Produce Heat.

e: Do Not Place Sources of Naked Flames, Such as Lighted Candles on The Unit.

f: Clean This Apparatus Only with Dry Cloth.

g: Unplug Tjos Appraratus During Lighting Storms or When Unused for Long Periods of Time.

h: Protect The Power Cord from Being Walked On or Pinched Particularly at Plugs.

i: Only Use Attachments / Accessories Specified by The Manufacturer

j: Refer All Servicing to Qualified Service Personnel.

Notice:

Oarsman Electronics Co., Ltd Reserves The Right To Revise Specification, Adjust Product Function, and Any Accompanying Documentation without Written Notice in Advance.