

# **HR** HALL RESEARCH

2, 4, and 8-Channel

## **User's Manual**



VGA Video Splitter / Distribution Amplifier

UMA1005 Rev. B

CUSTOMER  
SUPPORT  
INFORMATION

Order toll-free in the U.S. 800-959-6439  
FREE technical support, Call **714-641-6607** or fax **714-641-6698**  
Mail order: **Hall Research**, 1163 Warner Ave. Tustin, CA 92780  
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# Description

The Models 200, 400 and 800 are VGA video splitters that employ the latest technologies in high-resolution video distribution. The devices are compact, lightweight, low power, and highly reliable. The splitters terminate, buffer and amplify the computer's video signal with wide-bandwidth integrated circuits for display on multiple monitors. Depending on the length of the cable used, each output can reproduce a sharp and crisp image at any resolution up to 1920 x 1440.

The Splitters are capable of driving video extension cables to 150 feet or more depending on the resolution being displayed. Included with the device are a small power adapter and a 6 ft multi-coaxial cable for connection to the PC's video.

## Features

- Supports any resolution up to 1920x1440 at refresh rates from 60 to 85 Hz
- Rugged, Reliable, Economical
- No software required
- Drives cables to 150 ft or more
- Easily expand outputs by daisy-chaining

## Setup

This section gives you setup information on the Model 200, 400, and 800 video splitters. Your package should include a six foot VGA-Type video cable, a power adapter, and the Video Splitter unit itself. Please take inventory of all items received and ensure that you have the above items.

Locate the Video output connector on the Computer. This connector is generally a HD15 female with three rows of contacts. Using the cable supplied, connect the input of the Splitter to the computer.

Connect the monitors directly to the outputs of the Splitter, or use high-quality extension cables to remotely locate the monitors. Connect the supplied AC power adapter to the Splitter and plug it in the AC source.

### **Do Not Substitute Any Other DC Power Source (See Specifications for Details)**

If you are using long video cables (greater than 25 feet) on the output of the splitter, it is best to ensure that the cable is connected to a monitor (which properly terminates the signals), otherwise disconnect the cable from the Splitter.

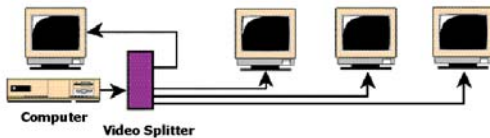
The Splitters are cascadable (i.e. connected in series) to provide large number of outputs if desired.

Standard Splitters can drive 150 feet of video cable without appreciable loss of resolution. For longer runs, Model 400-DX or VGA-to-CAT5 converters are recommended.

# Plug-and-Play

DDC (Direct Data Channel) is a standard by which a compatible monitor sends its identification and other parameters to a PnP operating system such as Windows 98 etc. Only one of the monitors connected to the splitter is allowed to communicate with the operating system. This means that the user should ensure that either all the monitors can support the resolution which will be set or disable the DDC and force any desired resolution and refresh rate from the "Display Properties" screen of the operating system. If upon connecting the Splitter you get a blank screen, it could be that your PC is looking for a monitor but cannot find any. In this case, either plug a monitor directly to the PC and disable PnP (by choosing a different standard-type monitor), or have at least one monitor plugged in to the specific output of the splitter that is assigned to the DDC channel (see Specifications for details).

## Connection Diagram



## Specifications

### Equipment included:

- UL approved 110 VAC adapter (6 VDC @ 300 or 800 mA output)
- 6 ft, high-resolution (multi-coaxial) video input cable
- User's Manual

### Dimensions: L x W x H:

Model 200 - 4¼ x 2¾ x 1¼    Model 400 - 7¼ x 2¾ x 1¼    Model 800 - 7¼ x 2¾ x 2¼

### Video Specs:

Connectors	Input and Outputs: HD15 female
Coupling	DC
Signal Level	Video: 0.7 v p-p
Bandwidth:	Range: DC to 250 MHz
Input impedance:	Video: 75 ohms on RGB, 1K ohms on H, V

### Plug-n-Play: DDC-Channel from Monitor to PC is on the following output positions:

Model 200 – Output #1    Model 400 - Output #4    Model 800 - Output #8

### **Power Requirements:**

The splitters rely on the AC power adapter, which is supplied with the unit. The adapters generate 6V DC power for the device. If you intend to use a different external DC power supply, the splitters may not function properly.

Hall Research manufactures Splitters that can operate from customer supplied external DC power supplies from 5 v to 24 v DC. Please contact factory or your distributor for details and pricing information.

### **Federal Communications Commission Statement**

This equipment generates, uses and radiates radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. This equipment has been tested and found to comply with the limits for a Class A computing device, pursuant to Part 15 of the FCC rules. Harmful interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures are necessary to correct the interference.

If necessary, you should consult the place of purchase or an experienced radio/television technician for additional suggestions.

### **Warranty**

Hall Research warrants that the supplied equipment is free from defective workmanship and material. Subject to the agreements set forth, will repair or replace, at its option, the defective components for a period of 2 years after purchase. The following conditions apply to the Warranty:

- Warranty void if item subject to improper use, negligence, or unauthorized modification
- Instructions must be followed in obtaining RMA number as explained below
- Any defective part should be returned, *insured and freight prepaid*, to Hall Research, with the following:
  - Return Material Authorization Number (RMA#)
  - Description of failure, as detailed as possible
  - Shipping address and contact name and phone number

### **Limited Liability**

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY EXCEED THE PRICE PAID FOR THE PRODUCT FROM DIRECT, INDIRECT, SPECIAL INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT OR ITS DOCUMENTATION

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